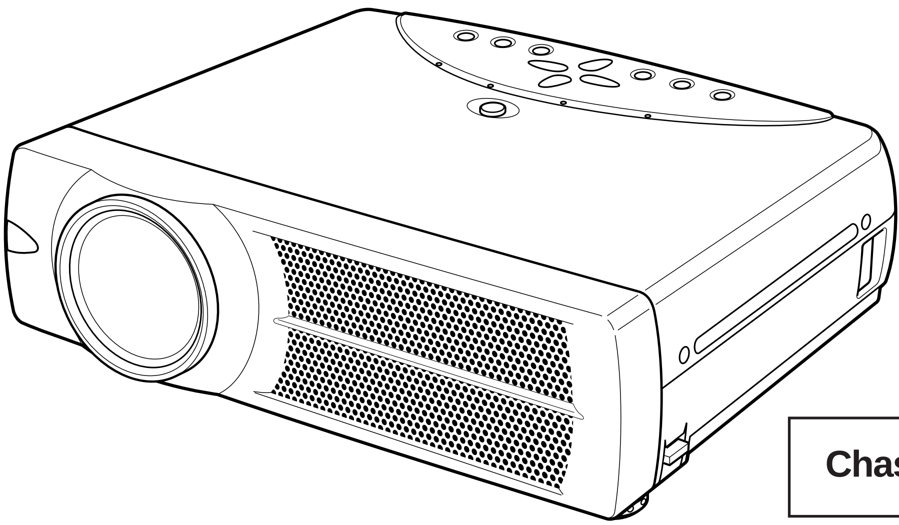
SERVICE MANUAL

SERVICE MANUAL

BOXLIGHT CP-16t

ORIGINAL VERSION



Chassis No. ME8-CP-16t00

NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.

If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.

BOXLIGHT®
Presenting a Better Way

PRODUCT CODE
(ME8E) **1 122 123 04**

REFERENCE NO. SM5110340

■ Contents

SAFETY PRECAUTIONS

WARNING:
The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (⏚⏚⏚) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of there parts must be made by exactly the same parts.

SERVICE PERSONNEL WARNING

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing.
Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages(15kV - 25kV) at its starts.
Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

DO NOT ATTEMPT TO SERVICING THE <u>REMOTE CONTROL UNIT</u>.

Laser Beam may be leaked out when in disassemble the Unit. As the Laser Beam used in this Remote control unit is harmful to the eyes.

CAUTION

LASER RADIATION
DO NOT STARE INTO BEAM

MAX. OUTPUT: 1mW
WAVE LENGTH: 650±20nm
CLASS II LASER PRODUCT

This product is complied with 21 CFR part 1040.10

LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
LASER-STRAHLING
NICHT IN DEN STRAHL BLICKEN
LASER KLASSE 2
レーザ放射クラス2レーザ製品
ビームをのぞき込まないこと
IEC60825-1, Am. 1 1997
MAX OUTPUT (最大出力) : 1 mW
WAVE LENGTH (波長) : 650±20nm

■ Specifications

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.11” x 3.52” x 9.96” (333mm x 89.5mm x 253mm)
Net Weight	9.5 lbs (4.3 kg)
LCD Panel System	0.9” TFT Active Matrix type, 3 panels
Panel Resolution	800 x 600 dots
Number of Pixels	1,440,000 (800 x 600 x 3 panels)
Color System	6 color system (PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N)
High Definition TV SIgnals	480i, 480p, 575i, 575p, 720p. 1035i and 1080i
Scanning Frequency	H-sync. 15 ~ 80kHz, V-sync. 50 ~ 100Hz
Projection Image Size (diagonal)	Adjustable from 34” to 300”
Horizontal Resolution	750 TV lines
Projection Lens	F 1.9 ~ 2.1 lens with f 21.3mm ~ 25.6mm with motor zoom and focus
Throw Distance	3.0’ ~ 22.6’ (0.9m ~ 6.9m)
Projection Lamp	200watts
AV Input Jacks	RCA Type x 3 (Video/Y, Cb/Pb, Cr/Pr) and Mini DIN 4 pin x 1(S-Video)
AV Audio Input Jacks	RCA Type x 2
Computer Input Jacks	(VGA) HDB15 Terminal x 1
Monitor Output Jacks	(VGA) HDB15 Terminal x 1
Computer Audio Input Jack	Mini Jack (stereo)
Control Port Connector	Mini DIN 8 pin x 1
USB Connector	USB Series B receptance x 1
External Speaker Jack	Mini Jack (8Ω 1+1W / stereo)
Internal Audio Amp.	1.0watt RMS (monaural)
Built-in Speaker	1 speaker, 1.18” x 1.57” (30mm x 40mm)
Feet Adjustment	0˚ to 15.6˚
Voltage and Power Consumption	AC 100 ~ 120V (3.6A Max. Ampere), 50/60Hz (The U.S.A and Canada) AC 200 ~ 240V (1.8A Max. Ampere), 50/60Hz (Continental Europe)
Operating Temperature	41˚F ~ 95˚F (5˚C ~ 35˚C)
Storage Temperature	14˚F ~ 140˚F (-10˚C ~ 60˚C)
Remote Control Transmitters	Wireless Remote Control, batteries AA, UM3 or R06 Type x 2

● The specifications are subject to change without notice.

This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

■ Adjustments after Parts Replacement

● : Adjustment necessary ❍ : Check necessary

		Disassembly / Replaced Parts									
		LCD/ Prism Ass'y	Condenser Lens	Condenser Lens-Out	Relay Lens-Out	Polarized glass			P. F. Board	Power Board	Main Board
						R	G	B			
Optical Adjustments	Condenser lens adjustment	❍	●								
	Condenser lens-out adjustment	❍		●							
	Relay lens-out adjustment	❍			●						
	Contrast Adjustment										
	R-Contrast adjustment					●					
	G-Contrast adjustment						●				
	B-Contrast adjustment							●			
Electrical Adjustments	Output voltage adjustment								●		
	Fan voltage adjustment									●	
	Pedestal adjustment										●
	NRS adjustment										●
	Signal center adjustment										●
	Black level adjustment										●
	PC offset adjustment										●
	PC gain adjustment										●
	AV gain adjustment										●
	Common center adjustment	●									●
	Gamma shift adjustment	❍									●
	White balance adjustment	❍									❍

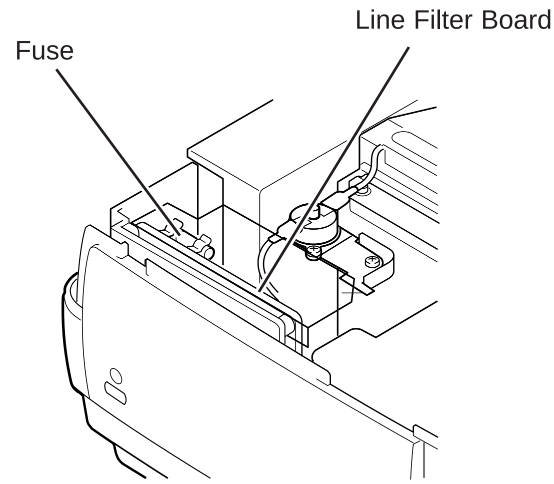
■ Circuit Protections

This projector is equipped with the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

● Fuse

The fuse is located inside of the projector. When either the LAMP indicator or the READY indicator is not illuminated, fuse may be opened. Check the fuse as following steps.
It should be used the specified fuse as follows;

Fuse Part No.: 423 022 2102 **TYPE T4.0AH 250V FUSE** **LITTLE FUSE INC. TYPE 215004**

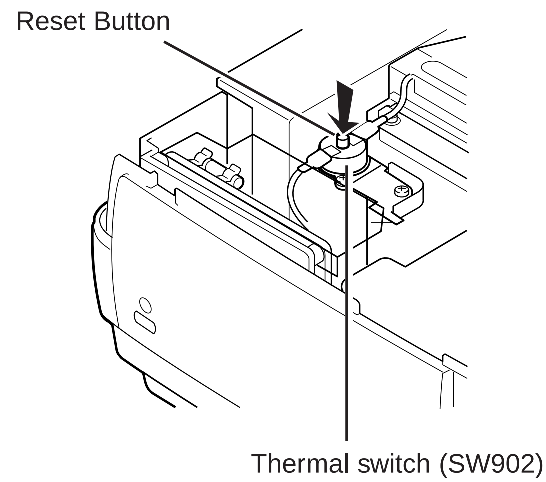


How to replace the fuse

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Remove the fuse from fuse holder.
To install the fuse, take reversed step in the above.

● Thermal switch

There is the thermal switch (SW902) inside of the projector to prevent the internal temperature from rising abnormally. When the internal temperature reaches near 100˚C, turn off the AC main power supply automatically.
The thermal switch is not reset to normal automatically even if the internal temperature becomes normal. Reset the thermal switch following procedure.
Check the resistance between terminals of thermal switch by using the tester. If it has high impedance, thermal switch may be in operative.



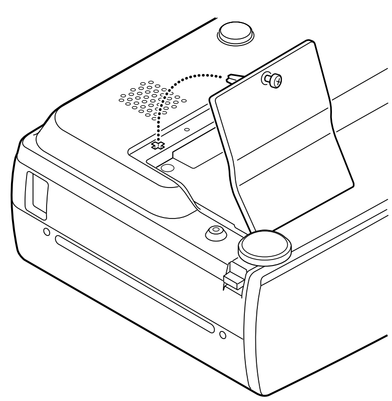
How to reset the thermal switch

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Press the reset button on the thermal switch.

CAUTION:
Before press the reset button, disconnect the AC cord from the projector.

● Interlock switch

The interlock switch (SW904) cuts off the AC mains power supply when the lamp cover is removed. After opening the lamp cover for replacing the lamp ass’y, place the lamp cover correctly otherwise the projector can not turn on.



● Warning temperature and power failure protection

The TEMP WARNING indicator flashes red and the projector will automatically turn off when the internal temperature of the projector exceeds the normal temperature or when stopping cooling fans or when the internal power supply lines are failed.

Check the following possible causes and wait until stopping the TEMP WARNING indicator flashing.

Possible causes

- Air filter is clogged with dust particles. Remove dust from the air filter by following instructions in the “Air filter care and cleaning” below.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 ˚C or 41 to 95˚F)

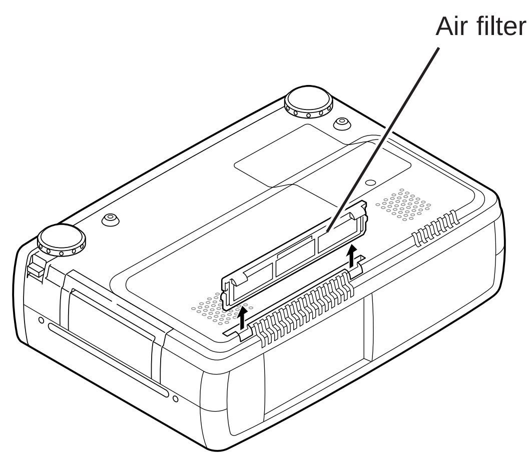
If the TEMP WARNING indicator still continues to flash, there may be defects on cooling fans or power supply circuits. Please check fan operation and power supply lines referring to the “Power Supply Lines Chart”.

Air filter care and cleaning

The removable air filter prevents dust from accumulation on the surface of the projection lens and projection mirror. Should the air filter become clogged with dust particles, it will reduce the cooling fan’s effectiveness and may result in internal heat build up and reduce the life of the projector.

To clean up the air filter, follow the cleaning procedure below:

1. Turn the power off, and disconnect the AC power cord from the AC outlet.
2. Turn the projector up side down and remove an air filter by pulling the latches of them upward.
3. Clean the air filter with brush or wash out the dust and particles.
4. Replace the air filter properly. Make sure that the air filter is fully inserted.



CAUTION:

Do not operate the projector with the air filter removed. The dust is stuck on the LCD panel and the mirror, and it may spoil the fine picture image.
Do not put the small parts into the air intake vents. It may result in the malfunction of the projector. The air filter is small parts. Take care that children don’t eat or swallow it.

RECOMMENDATION

We recommend to avoid dusty, smoky place for operating the projector. Using in dusty place may cause the picture of poor quality.
When using under the dusty or smoky conditions, dust may accumulate on the LCD panel and lens inside it, and may resultantly be projected on the screen together with the picture.
When the above symptoms are noticed, please clean up the LCD panel and lens following to the “Cleaning Method”.

■ Mechanical Disassemblies

Mechanical disassemble should be made following procedures in numerical order.
Following steps show the basic procedures, therefore unnecessary step may be ignored.
Caution:
The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

1 Cabinet Top and Control Panel removal

1 Remove 4 screws **A** to take the Cabinet Top Ass'y upward off.
2 Remove the Control Panel off from the Cabinet Top by lifting the edge of control panel.

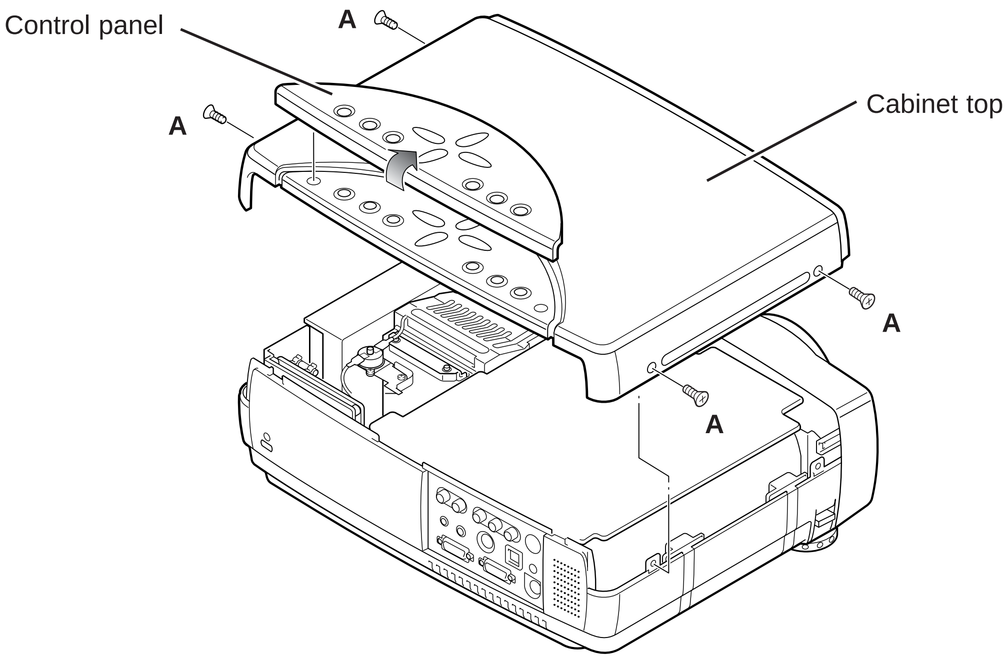


Fig.1

2 Main Board removal

1 Remove 8 screws to take the Main Board upward off.

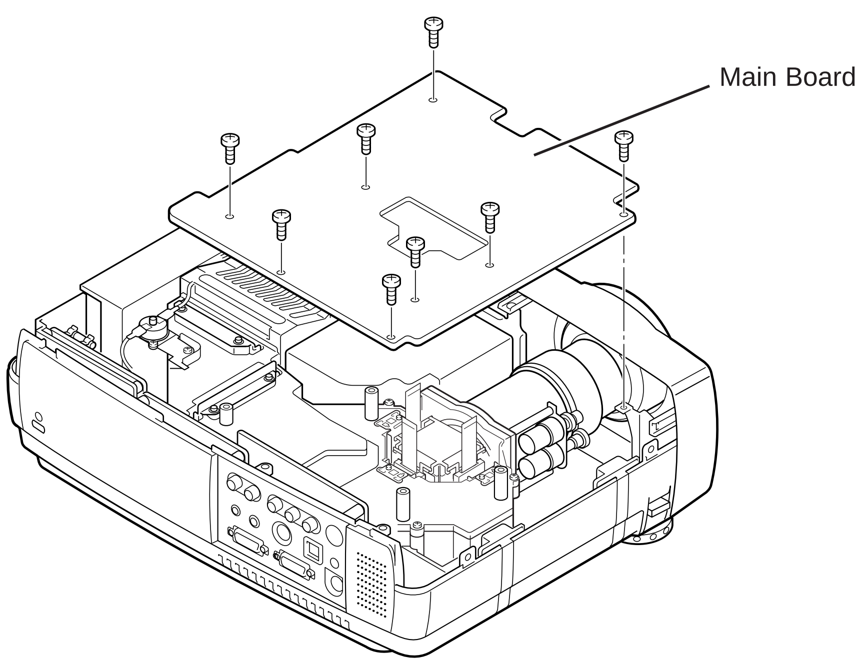


Fig.2

3 AV, AV Sub, Temp Board and Speaker removal

1 Remove 1 screw **A** to release a grounding wire.
2 Pull the Rear Panel ass'y upward.
3 Remove 4 screws **B** and remove the AV Board.
4 Remove 4 screws **C** and remove the AV Sub Board.
5 Remove 4 screws **D** and remove the speaker.
6 Remove 1 screw **E** and remove the Temp Board.

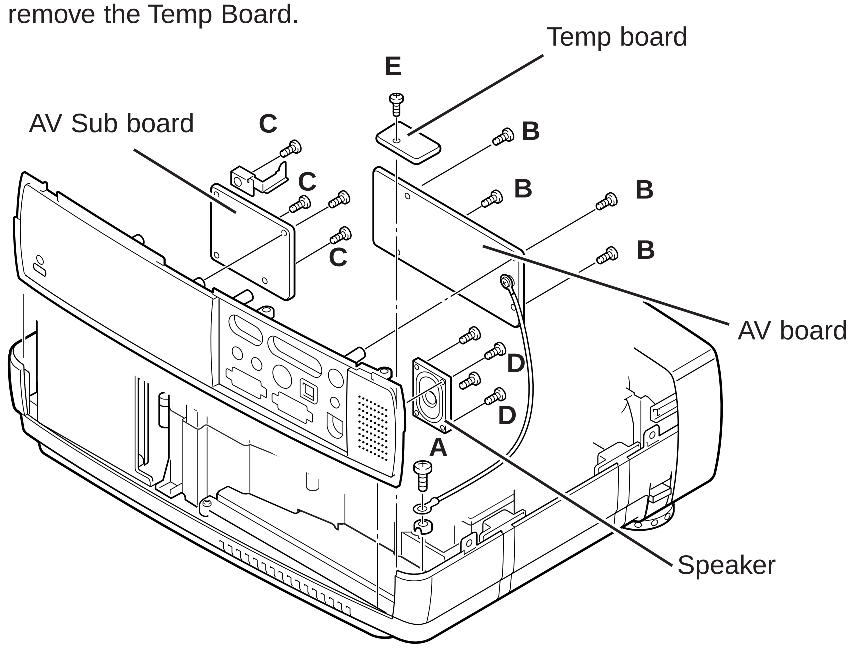


Fig.3

4 Front Panel and R/C Board removal

1 Remove 4 screws **A** and unhook 2 hooks **B** at the both of left and right side, and the take the Front Panel ass'y off.
2 Remove 1 screw **C** to take the R/C Board off.

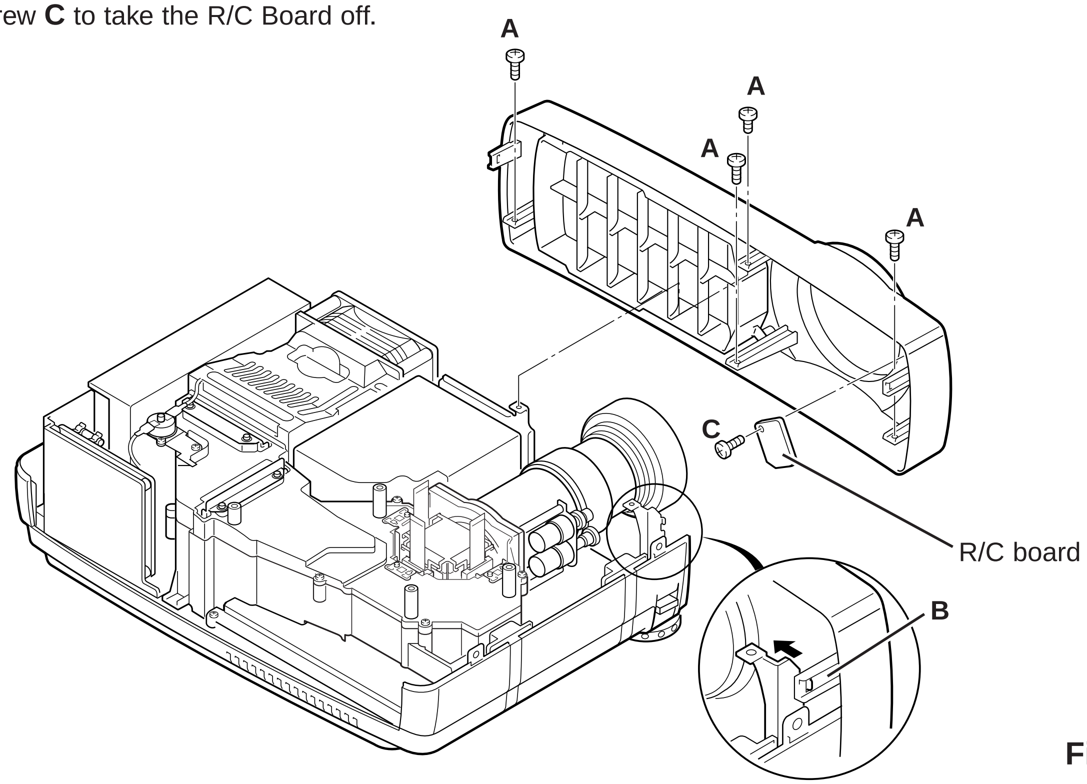


Fig.4

5 Lamp Ballast Unit removal

1 Remove 1 screw **A** and disconnect the Lamp Socket.
2 Remove 2 screws **B** to take the Lamp Ballast ass'y upward off.
3 Remove 2 screws **C** to take the isolation sheet off.
4 Remove 4 screws **D** to take the lamp ballast board off.

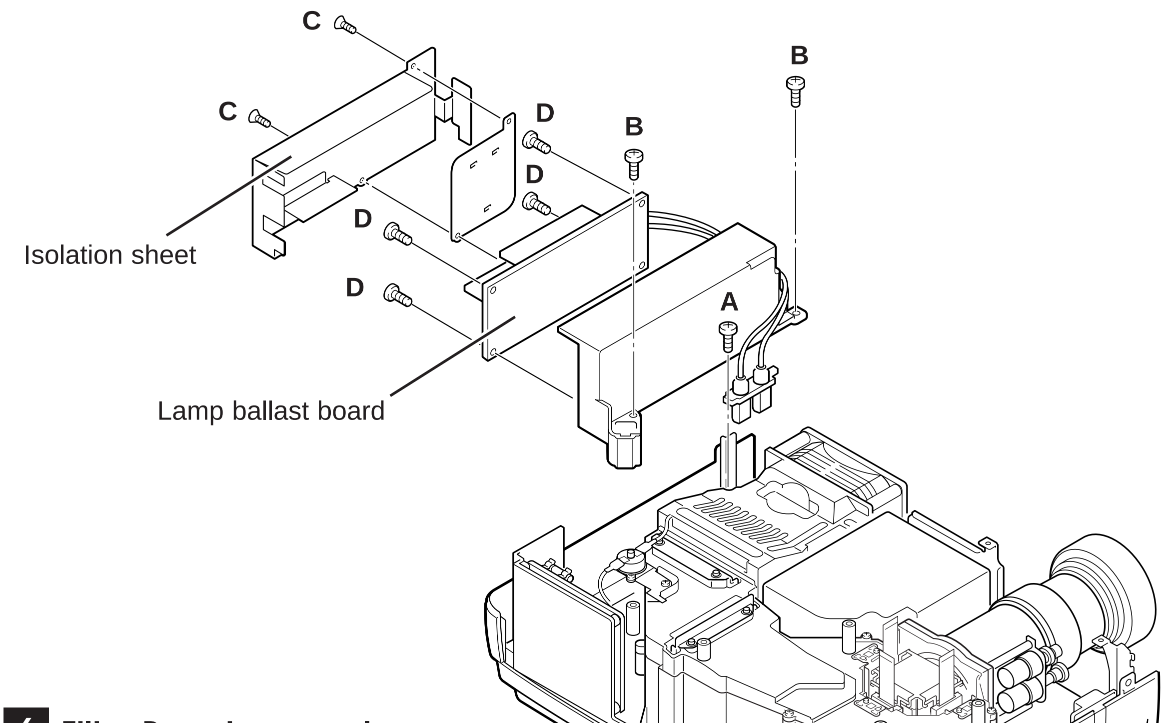


Fig.5

6 Filter Board removal

1 Remove 3 screws **A** and pull the Filter Board ass'y upward.
2 Remove 1 screw **B** to take the grounding lead from the cabinet bottom.
3 Remove 4 screws **C** to take the Filter Board off.

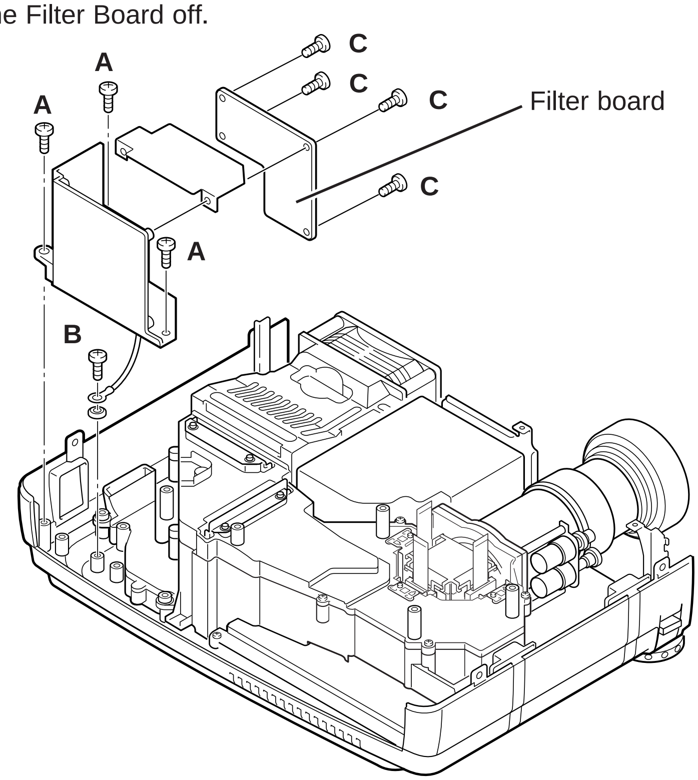


Fig.6

7 Power Box Cover and Fans(FN901, FN906) removal

1 Remove 4 screws **A** to take the Fan(FN901) off.
2 Remove 4 screws **B** to take the Fan(FN905) off.
3 Remove 3 screws **C** to take the Power Box Cover upward off.

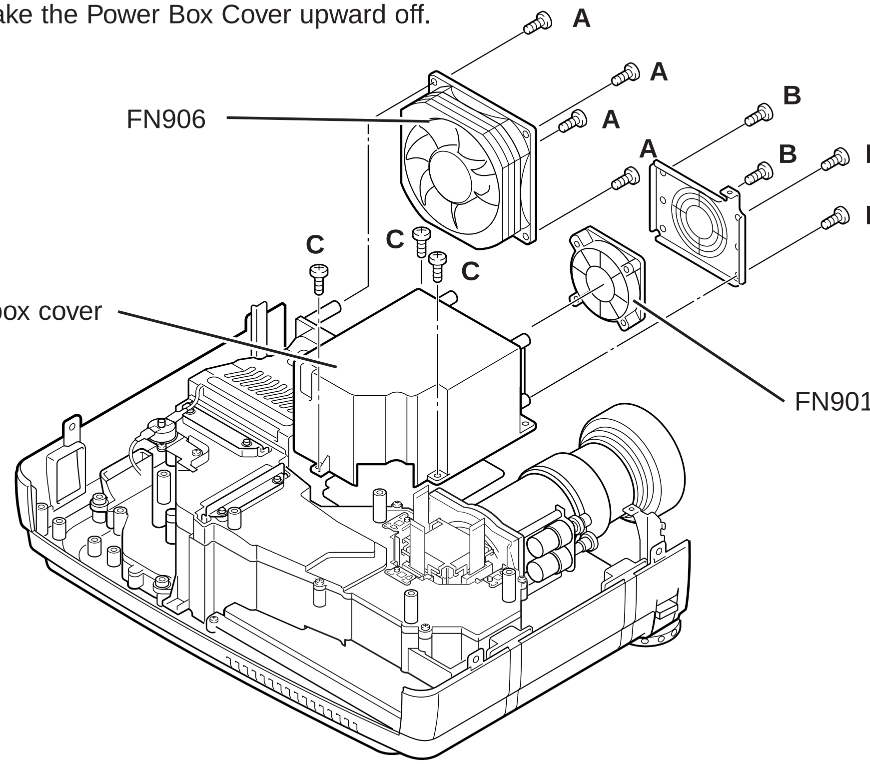


Fig.7

8-1 Optical Unit removal

1 Remove 1 screw **A** to take the Lamp Cover off.
2 Loosen 3 screws **B** to take the Lamp assembly by pulling the handle.
Step to next procedure.

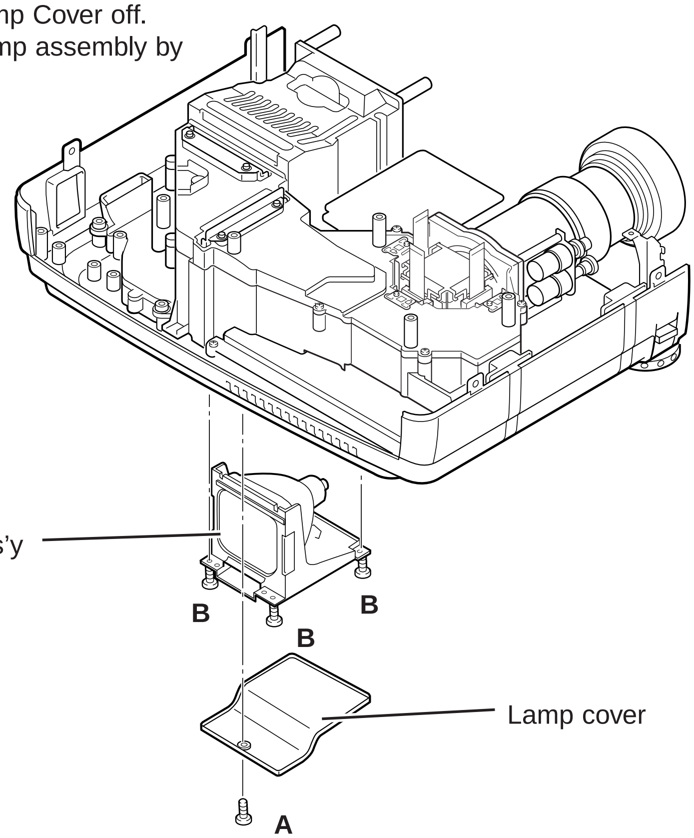


Fig.8-1

8-2 Optical Unit removal

Step from previous procedure.
3 Remove 6 screws **C** to take the Optical Unit upward upward off.
To mount optical unit, mount optical unit first then mount the Lamp assembly and Lamp Cover.

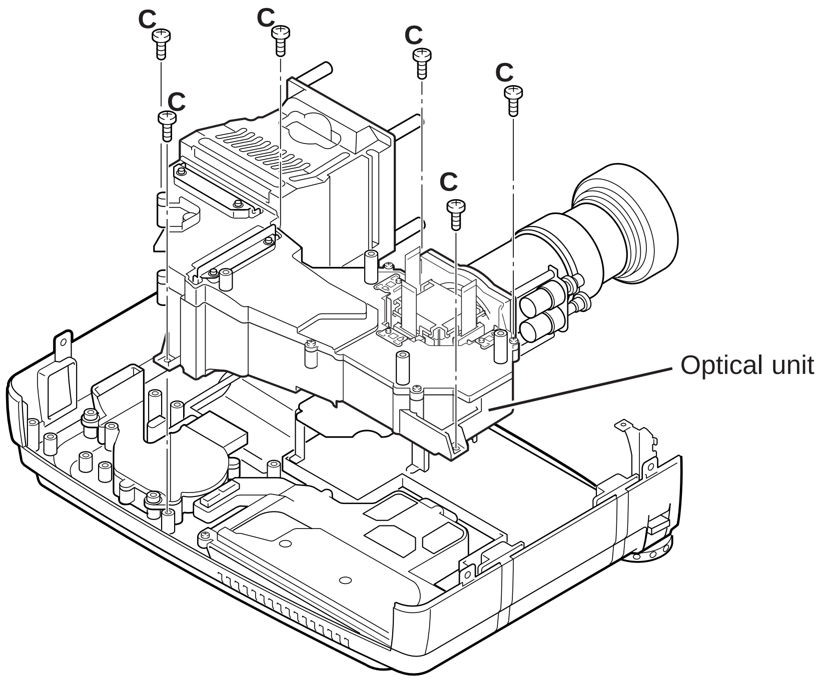


Fig.8-2

9 Power and P.F. Board removal

1 Remove 8 screws **A** to take the Power Board ass'y upward off.
2 Remove 4 screws **B** to take the P. F. Board from the Power Board.
3 Remove 3 screws **C** to take the Power Board holder from the Cabinet Bottom.

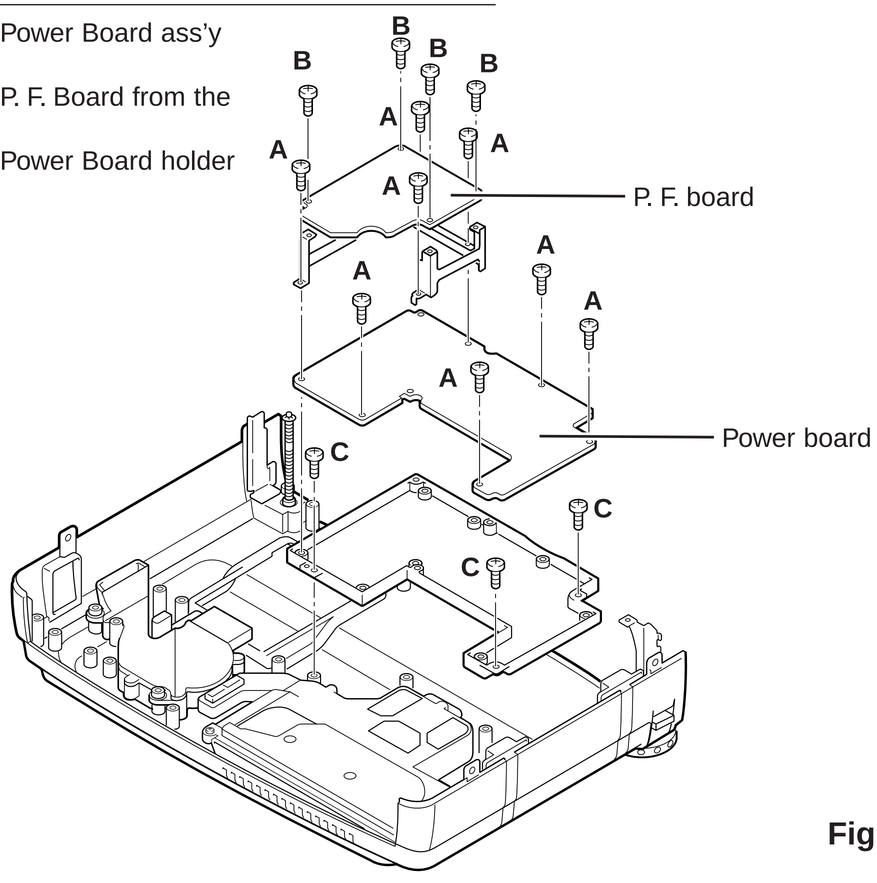


Fig.9

10 Fan (FN905) removal

1 Remove 1 screw **A** and take a Washer, Spring and Interlock Switch lever.
2 Pull the Fan and duct ass'y upward, then remove the 2 screws **B** to take the Fan (FN906) off.

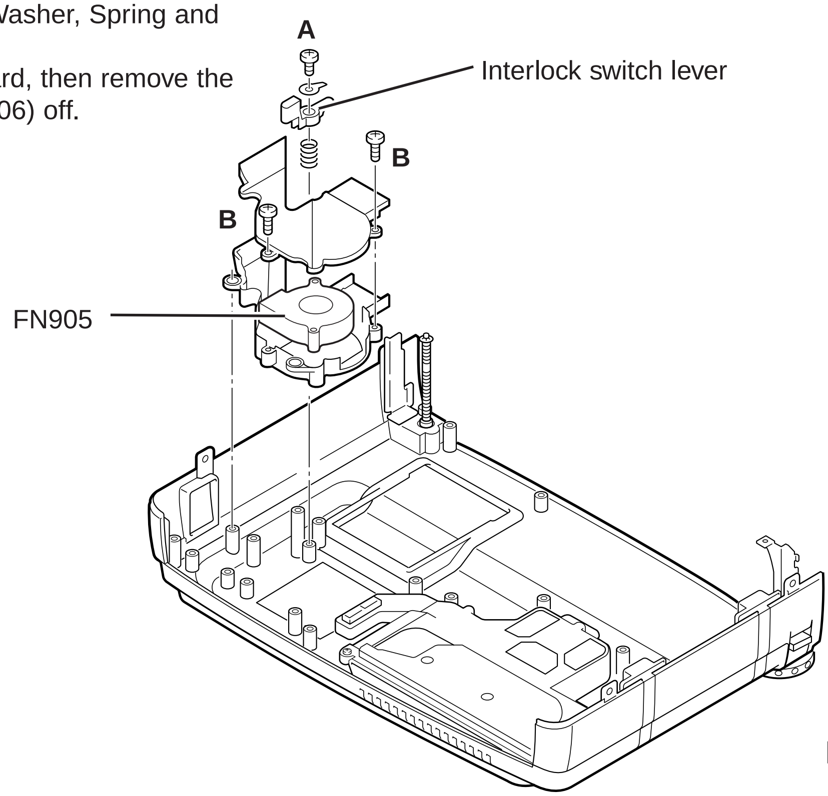


Fig.10

11 Temp Board and Fans (FN902, FN903, FN904) removal

1 Remove 1 screw **A** to take the Temp. Board off.
2 Remove 8 screws **B** and to take the Fan Duct Top off and remove the Fans (FN902, FN903, FN904).
3 Remove 4 screws **C** to take the Fan Duct Bottom off from the Cabinet Bottom.

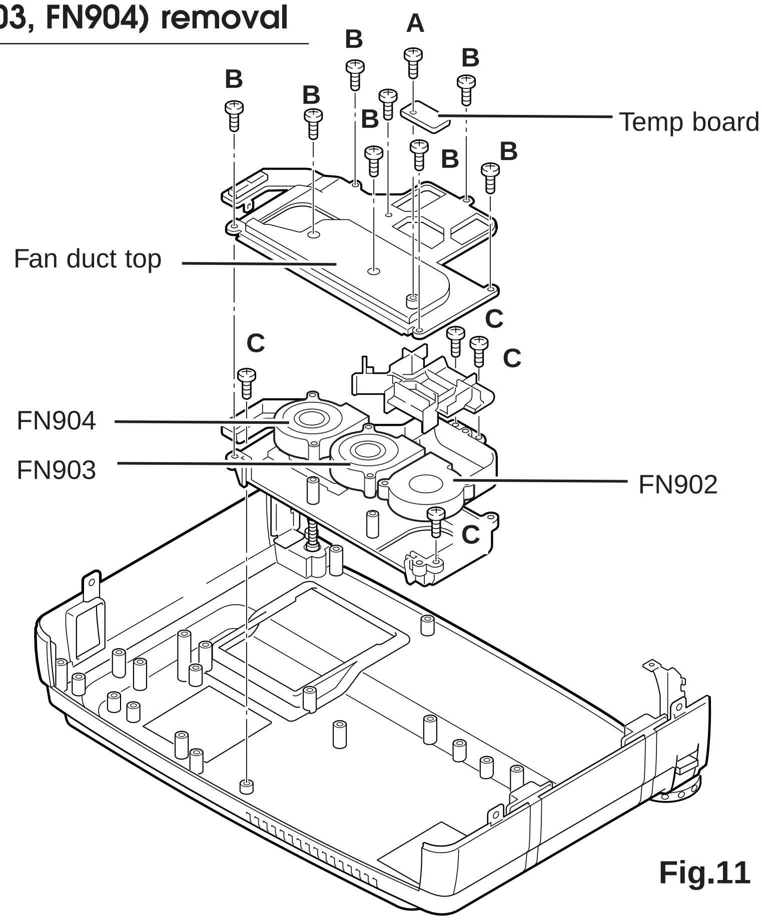


Fig.11

■ Optical Parts Disassemblies

Before taking this procedure, remove Cabinet Top and Main Board following to the “Mechanical Disassemblies”.
Disassembly requires a 2.0mm hex wrench and a screwdriver.

Projection Lens removal

1 Remove the Front Panel following to “Front Panel Removal” on “Mechanical Disassemblies”.
2 Remove 4 screws to take the Projection Lens ass’y off.

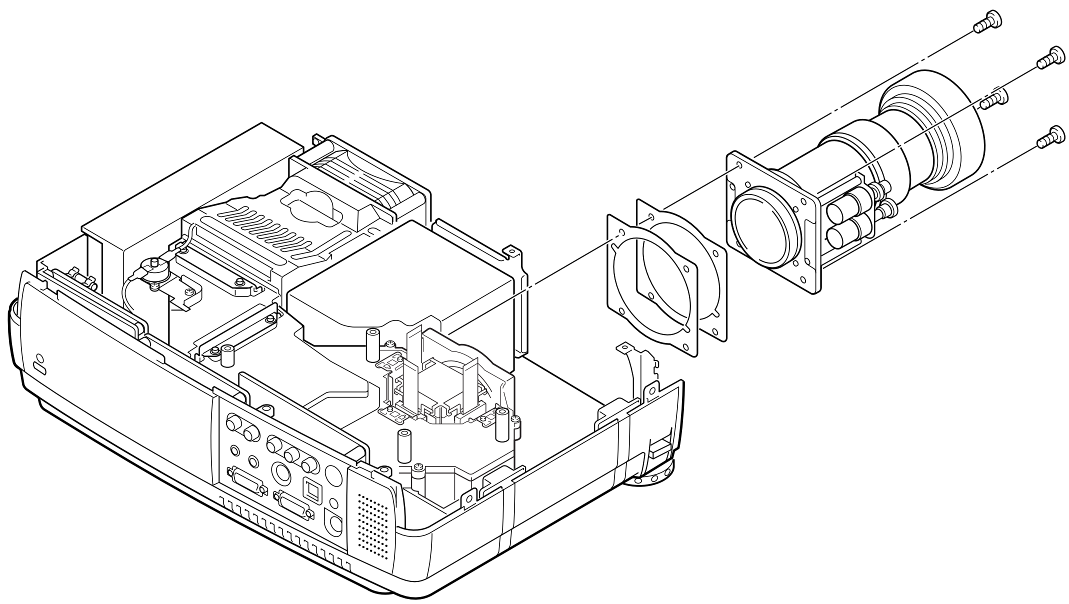


Fig.1

Integrator Lens-In disassembly

1 Remove 2 screws **A** and pull the Integrator Lens-In ass’y upward.
2 Remove 1 stoppers **B** and then take the Lens off from the holder.

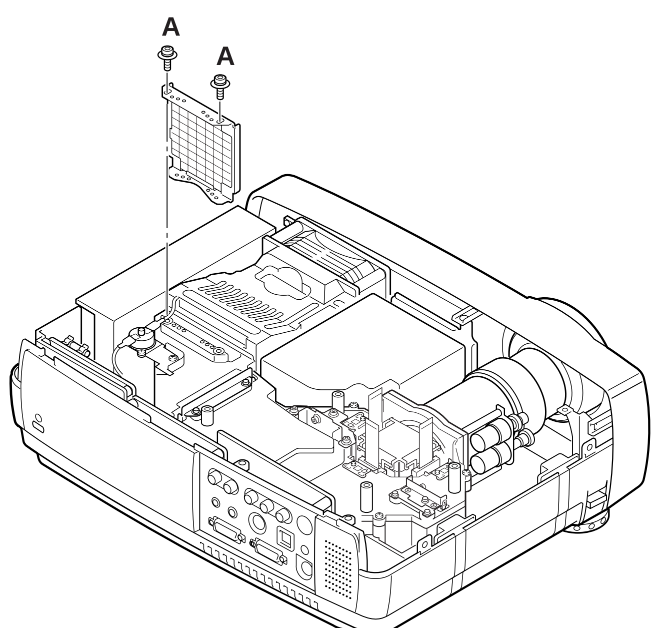
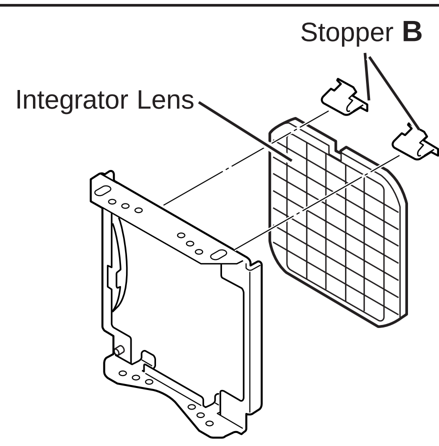


Fig.2-1



* Lens should be placed as the rugged surface side comes to the holder side.

Fig.2-2

Condenser lens disassembly

1 Remove 2 screws **A** and pull the Condenser Lens ass'y upward.
2 Remove 4 screws **B** to take the Lens off from the holder.

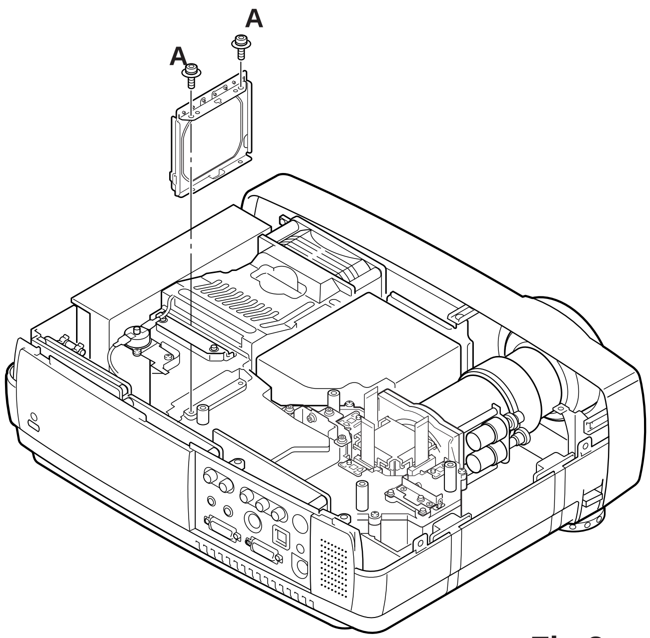
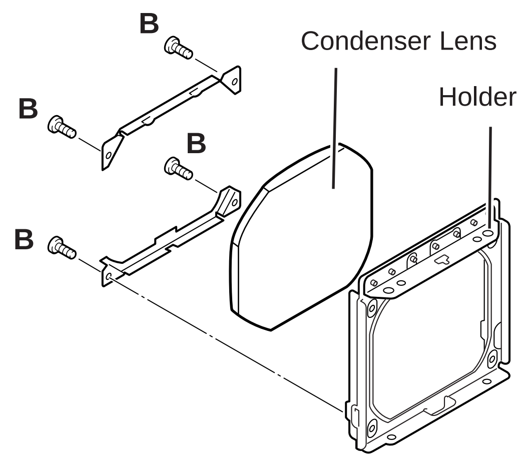


Fig.3-1



* Lens should be placed as the flat surface side comes to the holder side.

Fig.3-2

Condenser Lens-Out disassembly

1 Remove 2 screws **A** and pull the Condenser Lens-Out ass'y upward.
2 Remove 2 screws **B** to take the Lens off from the holder.
Note:
Should be place the lens as shown in the figure.

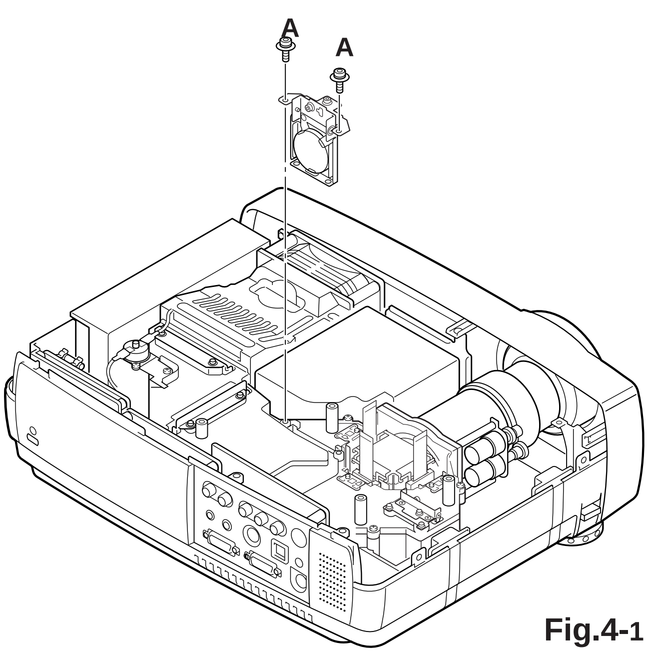


Fig.4-1

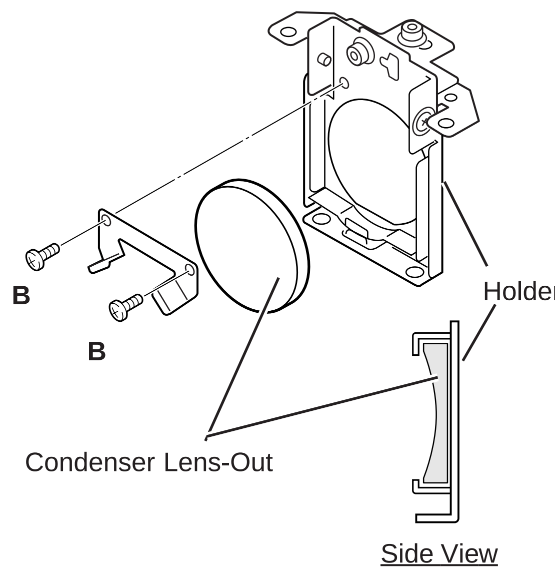


Fig.4-2

Relay Lens-Out disassembly

1 Remove 2 screws **A** and pull the Relay Lens-Out ass'y upward.
2 Remove 2 screws **B** to take the Lens off from the holder.
Note:
There is no mounting direction of the lens.

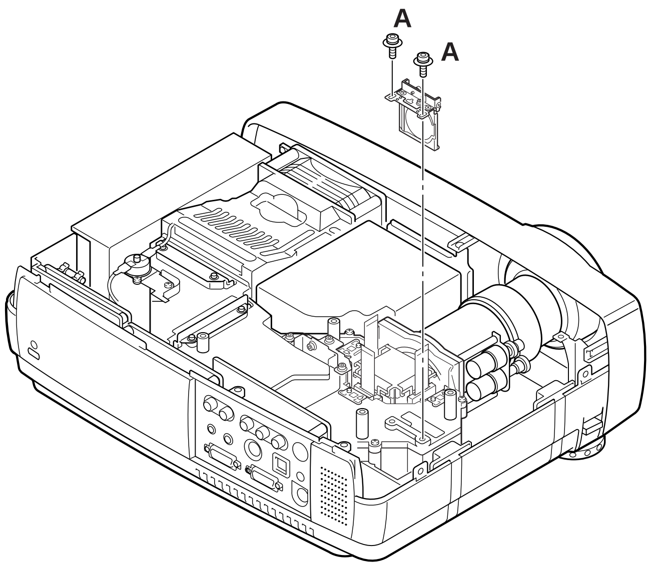


Fig.5-1

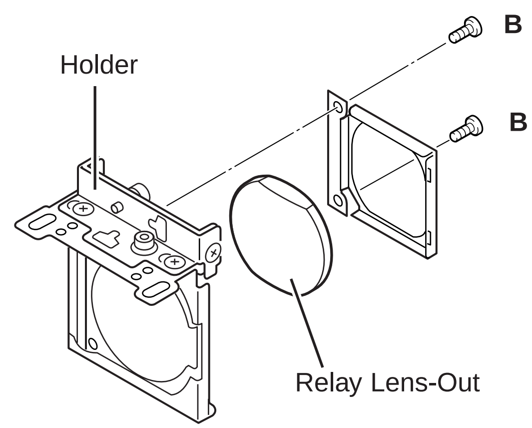


Fig.5-2

Polarized Glass-In removal

1 Remove each screw and pull the Polarized Glass-In ass'y upward.
2 Unhook the stoppers and take the glass off upward.

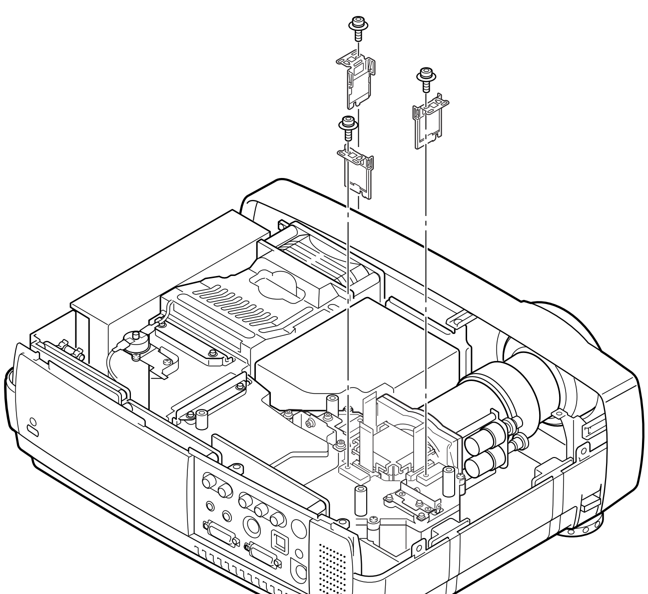
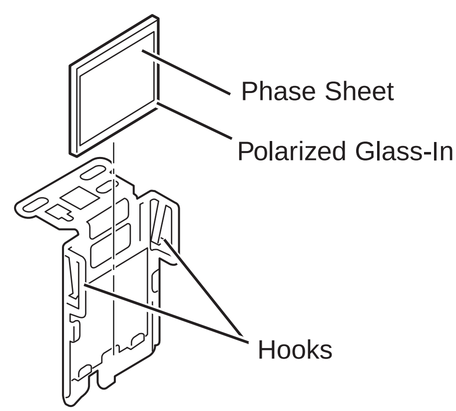


Fig.6-1



* Should be places the glass as the film attached side comes to the prism side.

Fig.6-2

Polarized Glass-Out removal

1 Remove 4 screws **A** and take the LCD/Prism ass'y off upward from the optical unit.
2 Remove each screw **B** and take the glass off upward.

Note:
Do not replace the LCD panel separately otherwise it can not obtain proper picture.

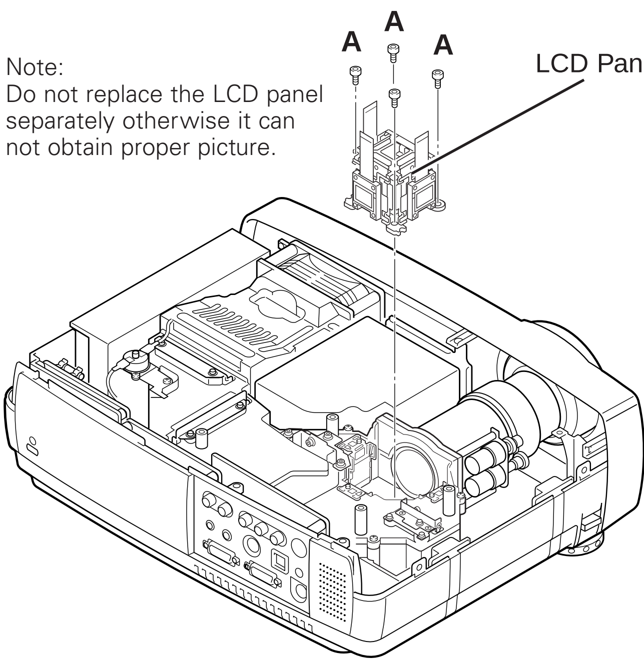
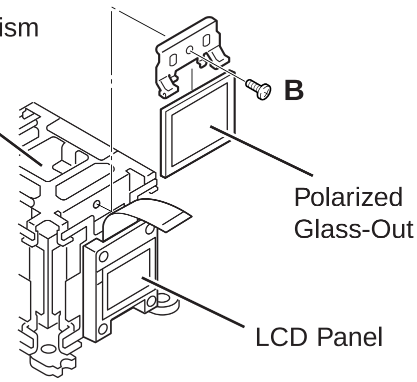


Fig.7-1



* Glass should be placed as the film attached side comes to the LCD panel side.

Fig.7-2

Optical Unit Top removal

1 Remove 9 screws to take the Optical Unit Top off upward.

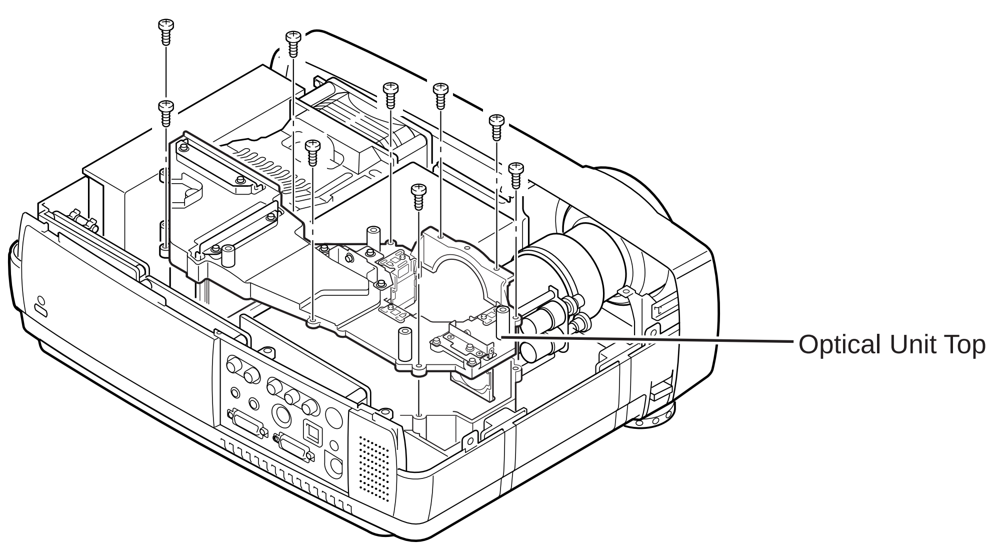


Fig.8

Locations and Directions

When mounting or assembling the optical parts in the optical unit, the parts must be mounted in the specified location and direction as shown in figure below.

Key No.	Description
1	Mirror (W)
2	Integrator lens (OUT)
3	Prism beam splitter (PBS)
4	Dichroic mirror (B)
5	Condenser lens (OUT)
6	Dichroic mirror (G)
7	Relay lens (IN)
8	Mirror (R)
9	Condenser lens (R)
10	Condenser lens
11	Condenser lens (B)
12	Optical filter (UV cut)
13	Mirror (B)

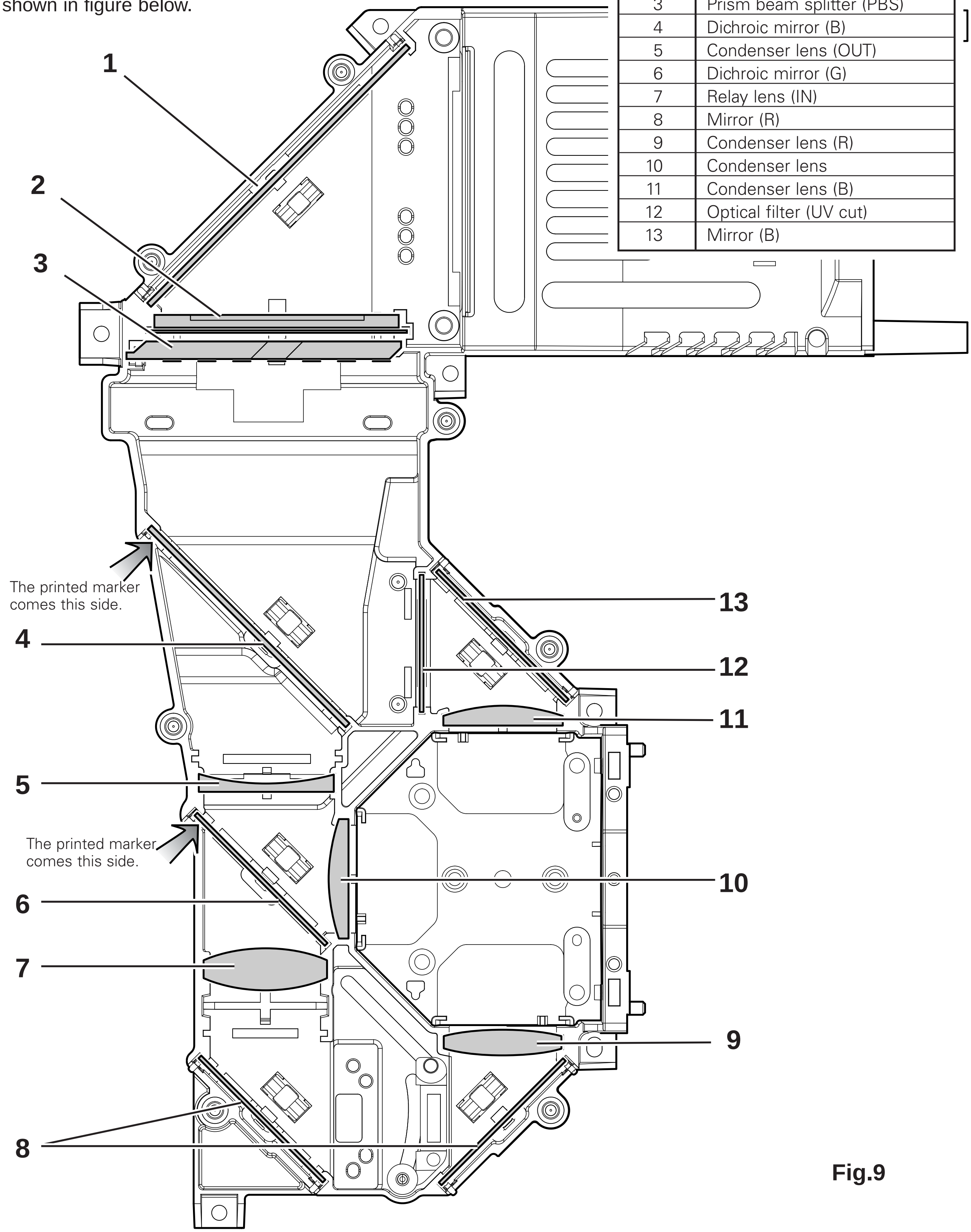


Fig.9

■ LCD Panel/Prism Ass'y Replacement

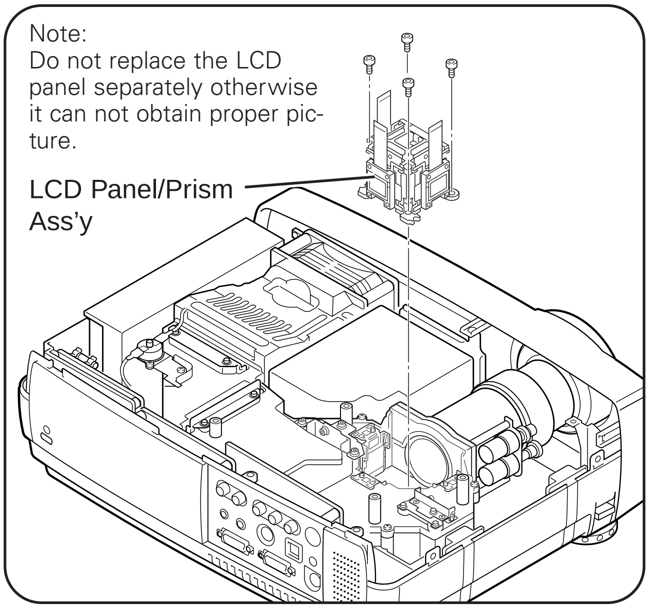
IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement
LCD panels used for this model can not be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.
After replacing LCD Panel/Prism ass'y, please check the following adjustments.

- Check the "Condenser Lens Adjustment" , "Condenser Lens-Out Adjustment" and "Relay Lens-Out Adjustment" following to chapter "Optical Adjustment".
- Check the "White Balance Adjustment" , "Common Center Adjustment" and "Gamma Shift Adjustment" following to chapter "Electrical Adjustment".
- Check the white uniformity on the screen.
  If you find the color shading, please adjust the white uniformity by using the proper computer and "Color Shading Correction" software supplied separately.

LCD Panel/Prism Ass'y removal

1 Remove the cabinet top and main board following to "Mechanical Disassemblies".
2 Remove 4 screws by using the 2.0 mm hex driver and take the LCD Panel/Prism ass'y off upward from the optical unit.

Note:
Do not replace the LCD panel separately otherwise it can not obtain proper picture.

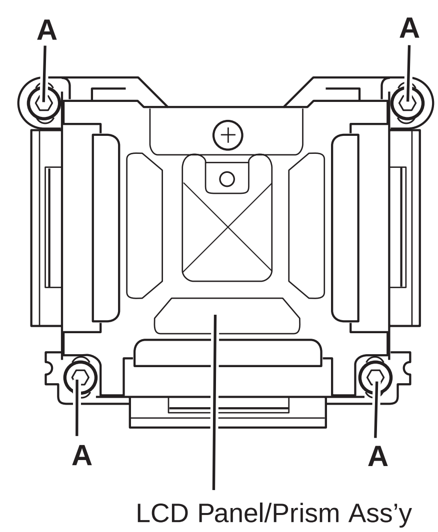


Note on LCD Panel/Prism Ass'y Mounting

After replacing or installing the LCD Panel/Prism ass'y, please make sure to obtain the best focus in both TELE and WIDE zoom. If the focus adjustment is required, please adjust the positioning of LCD Panel/Prism Ass'y by following below procedure.

Mounting Procedure:
1 Loosen 4 screws **A** on the LCD Panel/Prism ass'y with 2.0 mm hex driver.
2 Turn the projector on and project the image with WIDE zoom, and adjust the FOCUS control to obtain the best focus.
3 Turn the ZOOM control to the TELE position.
4 Move the LCD Panel/Prism Ass'y backward or forward (about 0mm ~ 0.8mm) to obtain the proper focus. Confirm the focus at TELE and WIDE zoom.
5 Tighten 4 screws **A** to fix the LCD Panel/Prism ass'y.

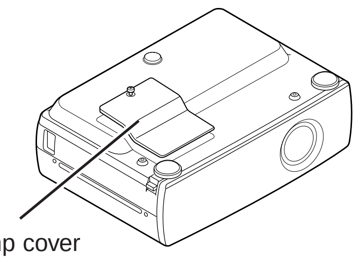
Top View

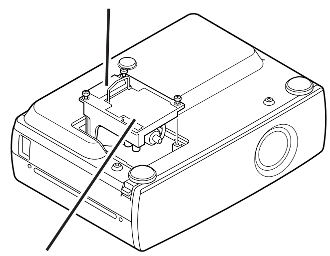


■ Lamp Replacement

WARNING:
- For continued safety, replace with a lamp assembly of the same type.
- Allow the projector to cool for at least 45 minutes before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp module or touch the glass bulb! The glass can shatter and cause injury.

ORDER REPLACEMENT LAMP	
Type No.	Service Parts No.
POA-LMP35	610 293 2751





Procedure

1 Turn off the projector and disconnect the AC cord. Allow the projector to cool for at least 45 minutes.
2 Remove a screw with a screwdriver and remove the lamp cover.
3 Remove 2 screws and pull out the lamp assembly by grasping the handle.
4 Replace the lamp assembly securely and tighten 3 screws.
5 Place the lamp cover and tighten a screw.
6 Connect the AC cord to the projector and turn on.

7 Reset the Lamp Replace Counter, see below explanation.

Note:
- Do not reset the Lamp Replace Counter, except after lamp is replaced.
- The projector can not be turned-on with lamp cover removed, because when the lamp cover is removed, the interlock switch is also released to switch off the mains power for safety.

How to reset Lamp Replace Counter

1 Turn the projector on, and press the **MENU** button and the on-screen menu will appear. Press the **POINT LEFT/RIGHT** buttons to move a red frame pointer to SETTING menu icon.
2 Press the **POINT DOWN** button to move a red frame pointer to "Lamp counter reset" and then press the **SELECT** button. The message "Lamp replace counter reset?" is displayed. Move the pointer to [Yes] and the press the **SELECT** button.
3 Another confirmation dialog box appears and select [Yes] to reset Lamp Replace Counter .

Please refer to the owners manual for further information.

Recommendation

Should the air filter become clogged with dust particles, it will reduce the cooling fan's effectiveness and may result in internal heat build up and short lamp life. We recommend cleaning the air filter after the projection lamp is replaced.
Refer to "Air Filter Cleaning".

How to check Lamp Replace Counter

The LAMP REPLACEMENT indicator will illuminate when the Lamp Replace Counter reaches 1000 hours. This is to indicate that lamp replacement is required.

You can check the lamp replace counter following to below procedure.

1 Press and hold the pointer **UP** on the projector for more than 20 seconds.
2 The Lamp replace Counter service menu appears on the screen. For example, when the value of data indicates "123", the accumulated operation time is 123 hours. To make this menu disappear, press Power button on the projector.

Service Mode		
Input	Video	
Group	No.	Data
10	0	123
Ver.	1	.00

Lamp replace counter data

■ Optical Adjustments

Before taking optical adjustments below, remove the Cabinet Top and Main Board following to the "Mechanical Disassemblies"
Adjustments require a 2.0mm hex wrench and a slot screwdriver. When you adjust Condenser lens, Condenser lens-out or Relay lens adjustment, you need to disconnect some connectors and FPC cables of LCD panels on the main board.
Note: Do not disconnect connectors K8N, K8P, K8H, K8R and K8S on the main board, because the projector can not turn on due to operate the power failure protection.

Contrast adjustment

[Before Adjustment]
- Input a 100% of black raster signal.

[R/G/B-CONTRAST ADJUSTMENT]

1 Loosen a screw **A** (**Fig.1-1/1-2**) on the polarized glass mounting base which you intend to adjust.
2 Turn the polarized glass mounting base as shown in **Fig.1-1** to obtain the darkest brightness on the screen.
3 Tighten the screw **A** to fix the polarized glass mounting base.

Repeat steps 1 to 3 for remaining polarized glasses.

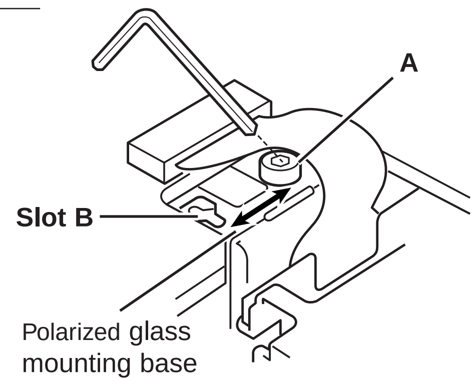


Fig.1-1

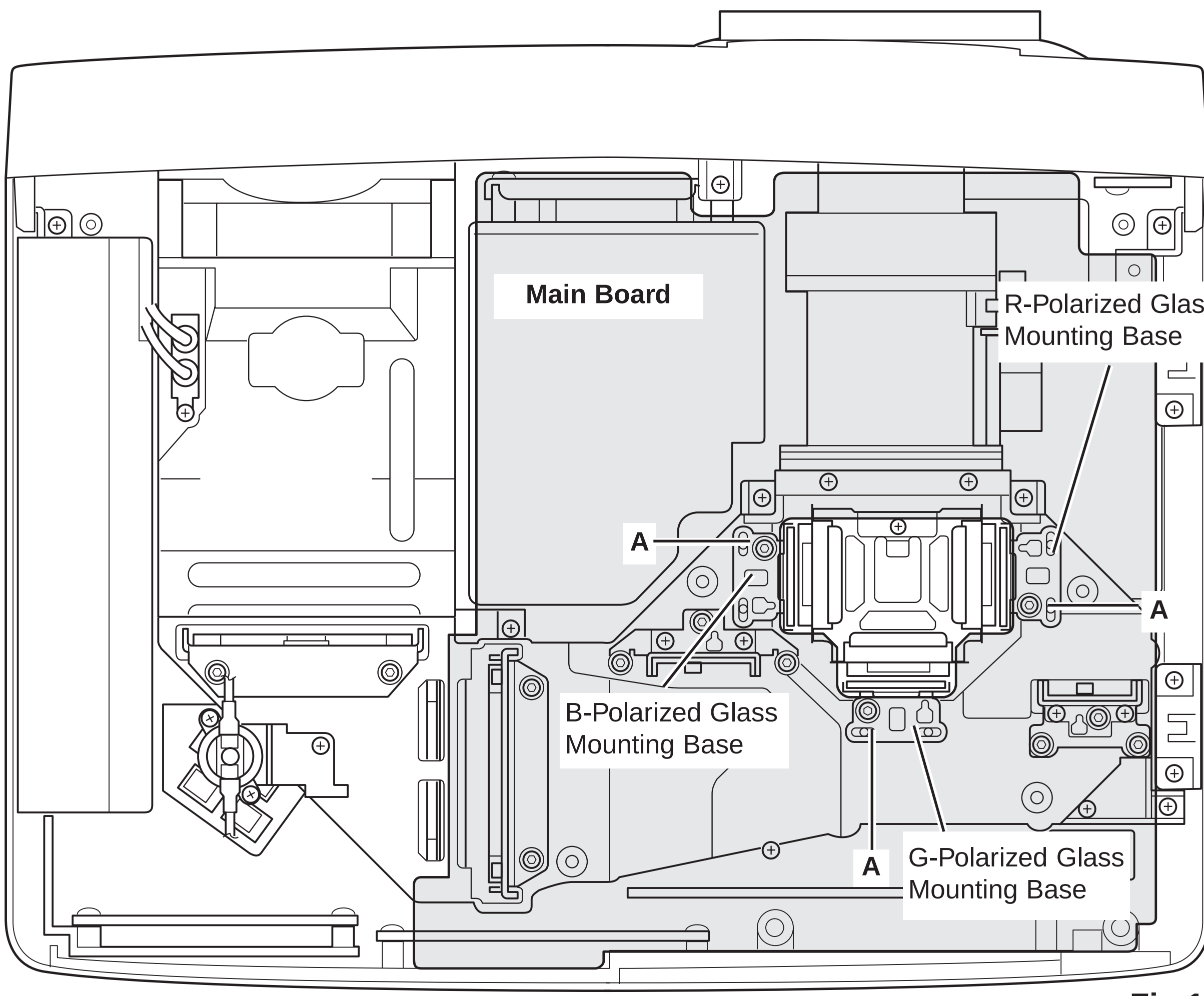


Fig.1-2

Condenser Lens adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project only green light on the screen.
3 Adjust the adjustment base of condenser lens assy to make color uniformity in green.
1) If the shading appears on the left or right of the screen as shown in **Fig.2-1**, loosen 2 screws **A** with the 2.0mm hex driver, and adjust the slot **B** to make color uniformity in green by using a slot screwdriver.
2) If the shading appears on the top or bottom of the screen as shown in **Fig.2-2**, loosen 2 screw **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in green by using a slot screwdriver
4 Tighten screws **A** and **C** to fix the Condenser lens unit.

Note:
The relay lens adjustment must be carried out after completing this adjustment.

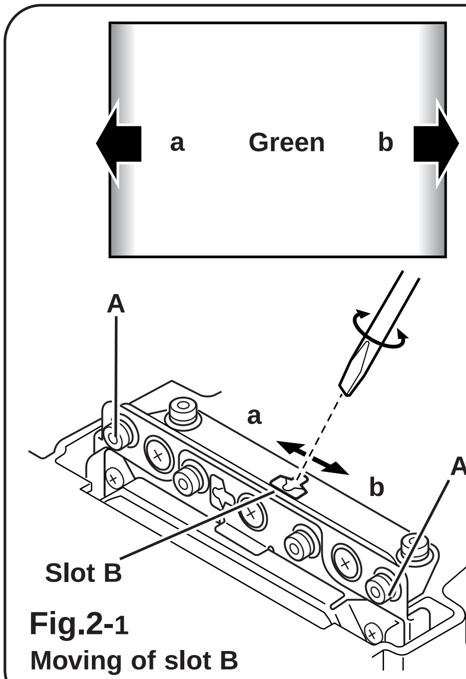


Fig.2-1
Moving of slot B

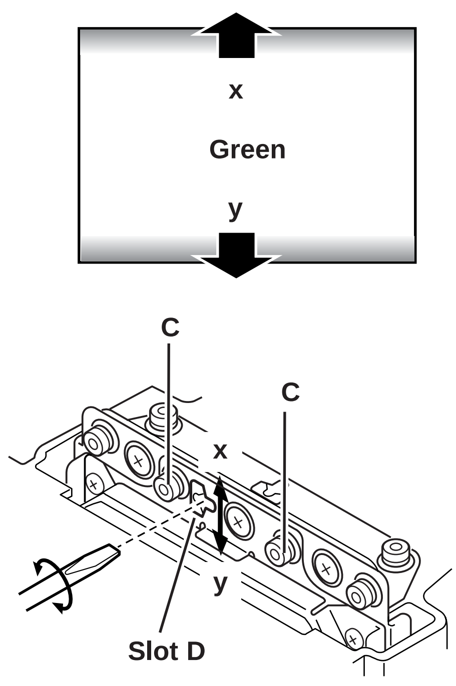
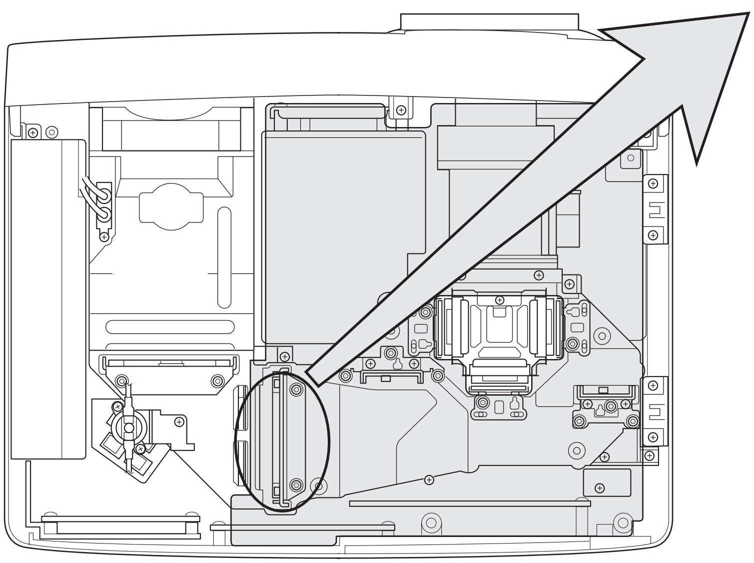
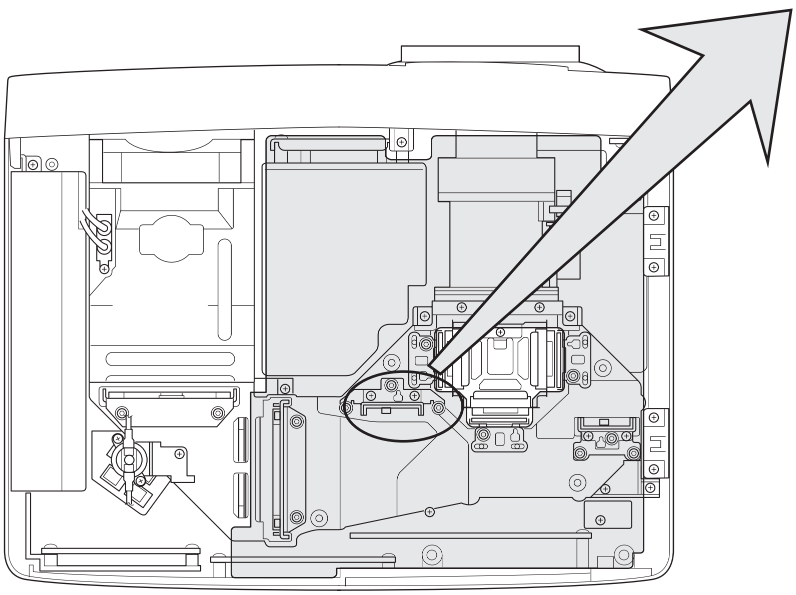


Fig.2-2
Moving of Slot D



Condenser Lens-Out adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project green and blue lights on the screen.
3 Adjust the adjustment base of condenser lens-out assy to make color uniformity in cyan.
   1) If the shading appears on the left or right of the screen as shown in **Fig.3-1**, loosen 1 screw **A** with the 2.0mm hex driver, and adjust the slot **B** to make color uniformity in cyan by using a slot screwdriver.
   2) If the shading appears on the top or bottom of the screen as shown in **Fig.3-2**, loosen 1 screw **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in cyan by using a slot screw driver.
4 Tighten the screw **A** and **C** to fix the relay lens unit.



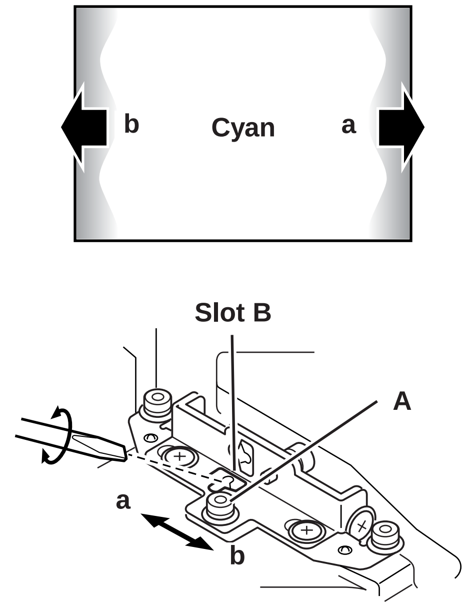


Fig.3-1
Moving of slot B

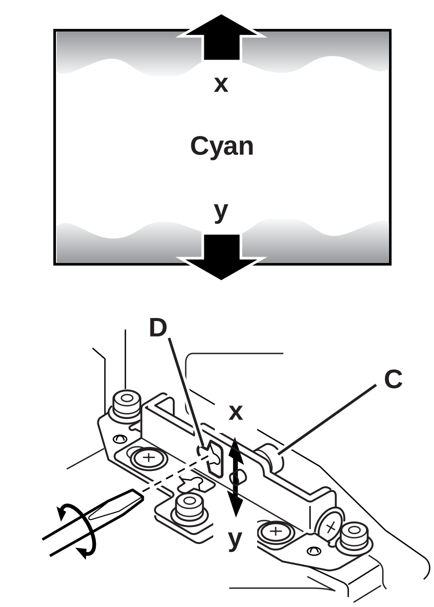
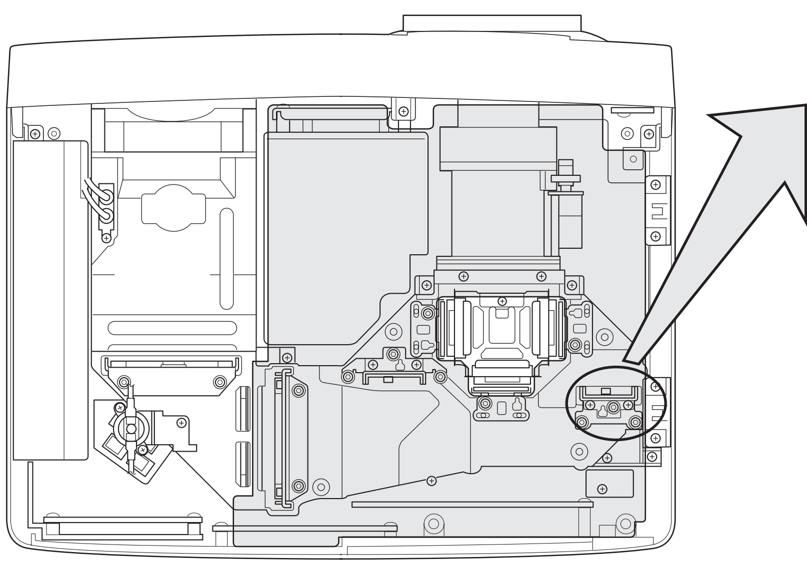


Fig.3-2
Moving of slot D

Relay lens-Out adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project all of lights on the screen.
3 Adjust the adjustment base of relay lens assy to make color uniformity in white.
  1) If the shading appears on the left or right of the screen as shown in **Fig.4-1**, loosen 1 screw **A** with the 2.0mm hex driver, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
  2) If the shading appears on the top or bottom of the screen as shown in **Fig.4-2**, loosen 1 screw **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in white by using a slot screwdriver.
4 Tighten the screws **A** and **C** to fix the relay lens unit.



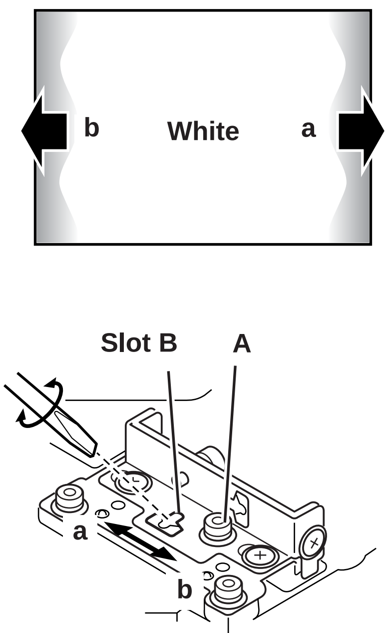


Fig.4-1
Moving of slot B

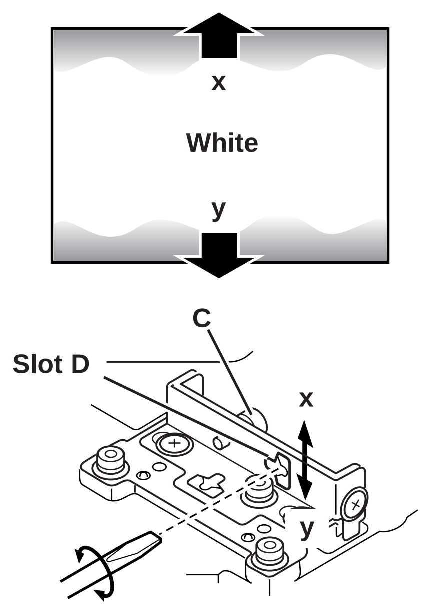


Fig.4-2
Moving of slot D

■ Electrical Adjustments

● Service Adjustment Menu Operation

To enter the service mode

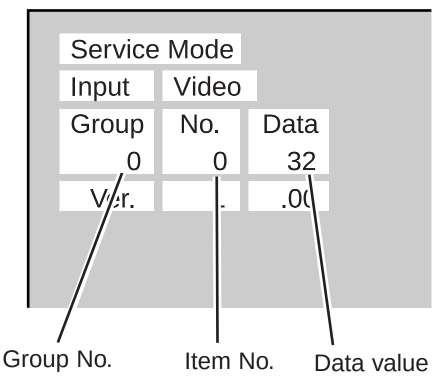
To enter the “Service Mode”, press and hold the **MENU** and **IMAGE button** on the projector at the same time for more than 3 seconds. The service menu appears on the screen as follows.

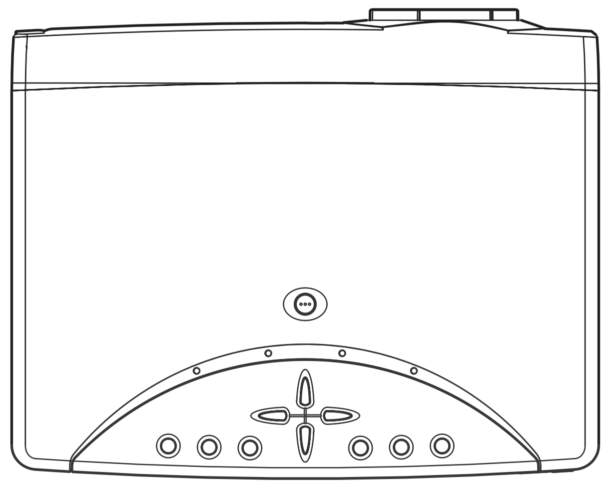
To adjust service data

Select the adjustment group no. by pressing the **MENU button**, and select the adjustment item no. by pressing the pointer **UP** or **DOWN button**, and change the data value by pressing the **VOLUME –** or **VOLUME + button**. Refer to the “Service Adjustment Data Table” for further description of adjustment group no., item no. and data value.

To exit the service mode

To exit the service mode, press the **POWER ON-OFF button** on the projector or remote control unit.





● Memory IC Replacement

IC1801 on the main board stores the data for the service adjustments, and should not be replaced except for the case of defective device.
If replaced, it should be performed the re-adjustments following to the “Electrical Adjustments”.
The data of lamp replacement monitor timer is stored in the IC1801.
Please note that the lamp replace counter is reset when the memory IC (IC1801) is replaced.
(Lamp replace counter can not be set to the previous value.)

● Caution to memory IC replacement

When IC1801 is replaced with new one, the CPU writes down the default data of the service adjustments to the replaced IC, refer to the service adjustment table. As these data are not the same data as factory shipped data, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
<u>Please note that the lamp replace counter is reset.</u>

● Caution of Main Board replacement (in the case IC1801 is not defective)

When the main board is replaced, IC1801 should be replaced with the one on previous main board. After replacement, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
<u>In this case, the lamp replace counter can be kept the value as before.</u>

● Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety.

[Adjustment Condition]

● Input signal

Video signal .... 1.0Vp-p/75Ω terminated, 16 steps gray scale (Composite video signal)
Computer signal...................... 0.7Vp-p/75Ω terminated, 16 steps gray scale pattern (SVGA)

● Picture control mode .... "STANDARD" mode unless otherwise noted.

Note:
* Please refer to "Service Adjustment Menu Operation" for entering to the service mode and adjusting the service data.

Output Voltage adjustment

After replacing the Power Board, PF.C. Board, readjust the Output voltage adjustment as follows.

1. Connect a digital voltmeter to pins 1 (+) and 3 (-) of **K6D**.
2. Adjust the voltage by using **VR611** as following.

	AC Input	Reading
	230V	370V ±2V
or	120V	340V ±2V

Caution:
Be sure to connect the lamp when taking this adjustment.

Fan Voltage adjustment

1. Enter the service mode and select group no. "**11**" and item no. "**0**". Set data value to "**1**".
2. Connect a digital voltmeter to test point "TP12V1" (+) and chassis ground (-). Select item no. "**1**" and change data value to adjust voltage to be 8.0 ±0.1V.
3. Connect a digital voltmeter to test point "TP12V2" (+) and chassis ground (-). Select item no. "**2**" and change data value to adjust voltage to be 9.0 ±0.1V.
4. Select group no. "**11**" and item no. "**0**" and set data value to "**3**".
5. Connect a digital voltmeter to test point "TP12V1" (+) and chassis ground (-). Select item no. "**3**" and change data value to adjust voltage to be 13.0 ±0.1V.
6. Connect a digital voltmeter to test point "TP12V2" (+) and chassis ground (-). Select item no. "**4**" and change data value to adjust voltage to be 13.5 ±0.1V.

Pedestal adjustment

1. Receive the 16-step grey scale video signal.
2. Set to **VIDEO** mode.
3. Enter the service mode.

[R-PEDESTAL ADJUSTMENT]

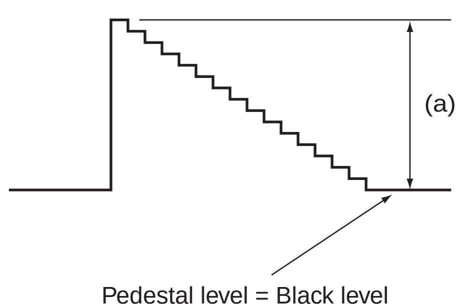
4. Connect an oscilloscope to test point "**TP201R**" (+) and chassis ground (-).
5. Select group no. "**3**", item no. "**14**" and change data value to adjust the pedestal level and black level to be the same level.

[G-PEDESTAL ADJUSTMENT]

6. Connect an oscilloscope to test point "**TP201G**" (+) and chassis ground (-).
7. Select group no. "**3**", item no. "**15**" and change data value to adjust the pedestal level and black level to be the same level.

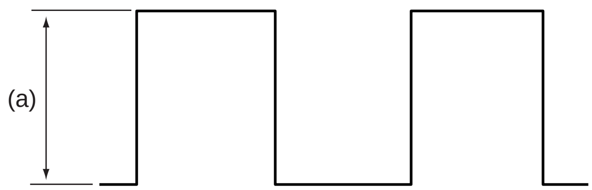
[B-PEDESTAL ADJUSTMENT]

8. Connect an oscilloscope to test point "**TP201B**" (+) and chassis ground (-).
9. Select group no. "**3**", item no. "**16**" and change data value to adjust the pedestal level and black level to be the same level.



NRS adjustment

1. Receive the 16-step grey scale computer signal.
2. Set to **COMPUTER** mode.
3. Connect an oscilloscope to test point “TP3551” (+) and chassis ground (-).
4. Enter the service mode, select group no. “**3**”, item no. “**7**” and change data value to adjust amplitude “a” to be 4.8 ±0.1V.



Signal Center adjustment

1. Receive the 16-step grey scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode.

[R-SIGNAL CENTER ADJUSTMENT]

4. Connect a digital voltmeter to test point “**TP25R1**” (+) and chassis ground (-).
5. Select group no. “**3**”, item no. “**0**” and change data value to adjust the voltage to be 7.30 ±0.05V.

[G-SIGNAL CENTER ADJUSTMENT]

6. Connect a digital voltmeter to test point “**TP25G1**” (+) and chassis ground (-).
7. Select group no. “**3**”, item no. “**1**” and change data value to adjust the voltage to be 7.30 ±0.05V.

[B-SIGNAL CENTER ADJUSTMENT]

8. Connect a digital voltmeter to test point “**TP25B1**” (+) and chassis ground (-).
9. Select group no. “**3**”, item no. “**2**” and change data value to adjust the voltage to be 7.30 ±0.05V.

Black Level adjustment

1. Receive the 16-step grey scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode.

[R-BLACK ADJUSTMENT]

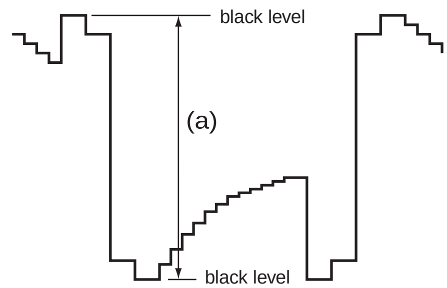
4. Connect an oscilloscope to test point “**TP25R1**” (+) and chassis ground (-).
5. Select group no. “**3**”, item no. “**3**” and change data value to adjust amplitude “a” to be 10.0 ±0.1V.

[R-BLACK ADJUSTMENT-]

6. Connect an oscilloscope to test point “**TP25G1**” (+) and chassis ground (-).
7. Select group no. “**3**”, item no. “**4**” and change data value to adjust amplitude “a” to be 10.0 ±0.1V.

[R-BLACK ADJUSTMENT-]

8. Connect an oscilloscope to test point “**TP25B1**” (+) and chassis ground (-).
9. Select group no. “**3**”, item no. “**5**” and change data value to adjust amplitude “a” to be 10.0 ±0.1V.



PC Offset adjustment

1. Receive the 16-step gray scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode.

[R-OFFSET ADJUSTMENT]

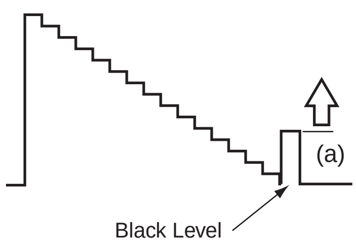
4. Connect an oscilloscope to test point “**TP25R1**” (+) and chassis ground (-).
5. Select group no. “**3**”, item no. “**11**” and change data value to adjust the waveform “a” (black portion) to be maximum amplitude.

[G-OFFSET ADJUSTMENT]

6. Connect an oscilloscope to test point “**TP25G1**” (+) and chassis ground (-).
7. Select group no. “**3**”, item no. “**12**” and change data value to adjust the waveform “a” (black portion) to be maximum amplitude.

[B-OFFSET ADJUSTMENT]

8. Connect an oscilloscope to test point “**TP25B1**” (+) and chassis ground (-).
9. Select group no. “**3**”, item no. “**13**” and change data value to adjust the waveform “a” (black portion) to be maximum amplitude.



PC Gain adjustment

1. Receive the 16-step gray scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode.

[R-GAIN ADJUSTMENT]

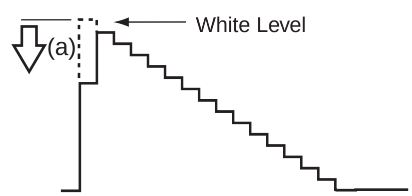
4. Connect an oscilloscope to test point “**TP25R1**” (+) and chassis ground (-).
5. Select group no. “**2**”, item no. “**3**” and change data value to adjust waveform “a” to be minimum amplitude.

[G-GAIN ADJUSTMENT]

6. Connect an oscilloscope to test point “**TP25G1**” (+) and chassis ground (-).
7. Select group no. “**2**”, item no. “**4**” and change data value to adjust waveform “a” to be minimum amplitude.

[B-GAIN ADJUSTMENT]

8. Connect an oscilloscope to test point “**TP25B1**” (+) and chassis ground (-).
9. Select group no. “**2**”, item no. “**5**” and change data value to adjust waveform “a” to be minimum amplitude.



AV Gain adjustment

1. Receive the 16-step gray scale video signal.
2. Set to **VIDEO** mode.
3. Enter the service mode.

[R-GAIN ADJUSTMENT]

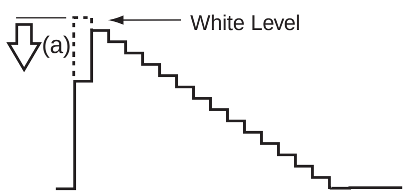
4. Connect an oscilloscope to test point "**TP25R1**" (+) and chassis ground (-).
5. Select group no. "**2**", item no. "**3**" and change data value to adjust waveform "a" to be minimum amplitude.

[G-GAIN ADJUSTMENT]

6. Connect an oscilloscope to test point "**TP25G1**" (+) and chassis ground (-).
7. Select group no. "**2**", item no. "**4**" and change data value to adjust waveform "a" to be minimum amplitude.

[B-GAIN ADJUSTMENT]

8. Connect an oscilloscope to test point "**TP25B1**" (+) and chassis ground (-).
9. Select group no. "**2**", item no. "**5**" and change data value to adjust waveform "a" to be minimum amplitude.



Common Center adjustment

1. Receive the 1 dot black & white pattern computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode.

[G-COMMON CENTER ADJUSTMENT]

4. Project only green light component to the screen.
5. Select group no. "**3**", item no. "**8**" and change data value to obtain the minimum flicker on the screen.

[B-COMMON CENTER ADJUSTMENT]

6. Project only blue light component to the screen.
7. Select group no. "**3**", item no. "**9**" and change data value to obtain the minimum flicker on the screen.

[R-COMMON CENTER ADJUSTMENT]

8. Project only red light component to the screen.
9. Select group no. "**3**", item no. "**10**" and change data value to obtain the minimum flicker on the screen.

Gamma Shift adjustment

[PC-GAMMA OFF ADJUSTMENT]

1. Receive the 16-step gray scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode, select group no. "**2**", item no. "**6**" and change data value to reproduce the proper gray scale picture on the screen.

[AV-GAMMA OFF ADJUSTMENT]

4. Receive the 16-step gray scale video signal.
5. Set to **VIDEO** mode.
6. Enter the service mode, select group no. "**2**", item no. "**6**" and change data value to reproduce the proper gray scale picture on the screen.

White Balance adjustment

[PC WHITE BALANCE ADJUSTMENT]

1. Receive the 16-step gray scale computer signal.
2. Set to **COMPUTER** mode.
3. Enter the service mode, select group no. "**2**", item no. "**7**" (Red) or "**8**" (Blue), and change data values respectively to make a proper white balance.

[AV WHITE BALANCE ADJUSTMENT]

4. Receive the 16-step grey scale video signal.
5. Set to **VIDEO** mode.
6. Enter the service mode, select group no. "**2**", item no. "**7**" (Red) or "**8**" (Blue), and change data values respectively to make a proper white balance.

Confirm that the same white balance is obtained in video and computer input.

NOTE ON WHITE UNIFORMITY ADJUSTMENT

If you find the color shading on the screen, please adjust the white uniformity by using the proper computer and "Color Shading Correction" software supplied separately.

● Service Adjustment Data Table

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with "∗" are required to readjust following to the "Electrical adjustments". Other items should be used with the initial data value.

No.	Adjustment Item	Initial Value						Range	Description
Group: 0 TB1274									
0	TINT	32						0 ~ 63	
1	SHP_EQ	2						0 ~ 3	
2	SHP_FO	1						0 ~ 3	
		NTSC,PAL	SECAM,NT4.43	S-Video	Y,Cb,Cr				
3	SHP_GAIN	8	8	9	9			0 ~ 15	
		NTSC	**NT4.43**	**PAL**	**SECAM**				
4	Y_OUT_LEVEL	30	30	31	31			0 ~ 63	
		S-Video NTSC	S-Video PAL	S-Video SECAM	Y,Cb,Cr				
		30	31	31	31				
		NTSC	NT4.43	PAL	SECAM				
5	C_OUT_LEVEL	32	32	32	32			0 ~ 63	
		S-Video NTSC	S-Video PAL	S-Video SECAM	Y,Cb,Cr				
		32	32	32	32				
		NTSC	PAL	SECAM	NT4.43	PAL 60			
6	Y_DELAY	6	6	3	4	4		0 ~ 15	
		S-Video NTSC	S-Video PAL	S-Video SECAM	S-Video NT4.43	S-Video PAL60			
		4	4	3	3	4			
7	COL_SYS	-						-	Read only
8	X'TAL	-						-	
9	NOISE_DET	-						-	
10	V_FREQ	-						-	
11	Vert. Std	-						-	
12	CID	-						-	
13	V_SIG	-						-	
		NTSC,PAL	SECAM,NT4.43	S-Video	YCbCr				
14	Cinema SHP_GAIN	7	7	8	8			0 ~ 15	For cinema mode
Group: 1 CXA2101									
0	PICTURE	30						0 ~ 63	
1	BRIGHT	31						0 ~ 63	
2	R_DRIVE	31						0 ~ 63	
3	G_DRIVE	31						0 ~ 63	
4	B_DRIVE	31						0 ~ 63	
5	HSEP_SEL	1						0 ~ 1	
6	CR_OFFSET1	15kHz: 7	Others: 10					0 ~ 15	
7	CB_OFFSET1	15kHz: 7	Others: 10					0 ~ 15	
8	BLK_BOTTOM	15						0 ~ 15	
		NTSC	PAL, SECAM	1035i	Y,Cb,Cr *1				*1 Y, Cb, Cr and Y, Pb, Pr except 1035i
9	R-Y/R	6	13	6	6			0 ~ 15	
10	R-Y/B	5	15	5	5			0 ~ 15	
11	G-Y/R	8	8	8	8			0 ~ 15	
12	G-Y/B	10	4	10	10			0 ~ 15	
13	MAT_OUT	0	0	0	1			0 ~ 3	
		15kHz 480i, 575i	480p, 575p	1080i, 1035i, 720p					
14	SYSTEM	0	1	2				0 ~ 3	
15	V_TC	3	3	3				0 ~ 3	
16	H_WIDTH	3	2	0				0 ~ 3	
17	HS_MASK	0	1	1				0 ~ 1	
		Video, S-Video	480i, 575i	480p, 575p	1080i, 1035i, 720p				
18	CTI_LEVEL	2	2	2	2			0 ~ 3	
		15kHz 480i, 575i	480p, 575p	1080i, 1035i, 720p					
19	SUB_SHP	2	2	2				0 ~ 3	
20	SHP_FO	0	2	3				0 ~ 3	
21	PRE_OVER	2	2	3				0 ~ 3	
22	LTI_LEVEL	0	1	1				0 ~ 3	
23	D_PIC	0	0	0				0 ~ 3	
24	HUE	31						0 ~ 63	Only adjustable for PAL,SECAM
		NTSC	PAL,SECAM	525i,480p	625i,575p	1035i	Others		
25	SUB_COL	5	5	12	12	6	9	0 ~ 15	
26	SUB_HUE	7	7	8	7	9	6	0 ~ 15	
27	Cinema CTI_LEVEL	2						0 ~ 3	Set this value at Cinema Mode

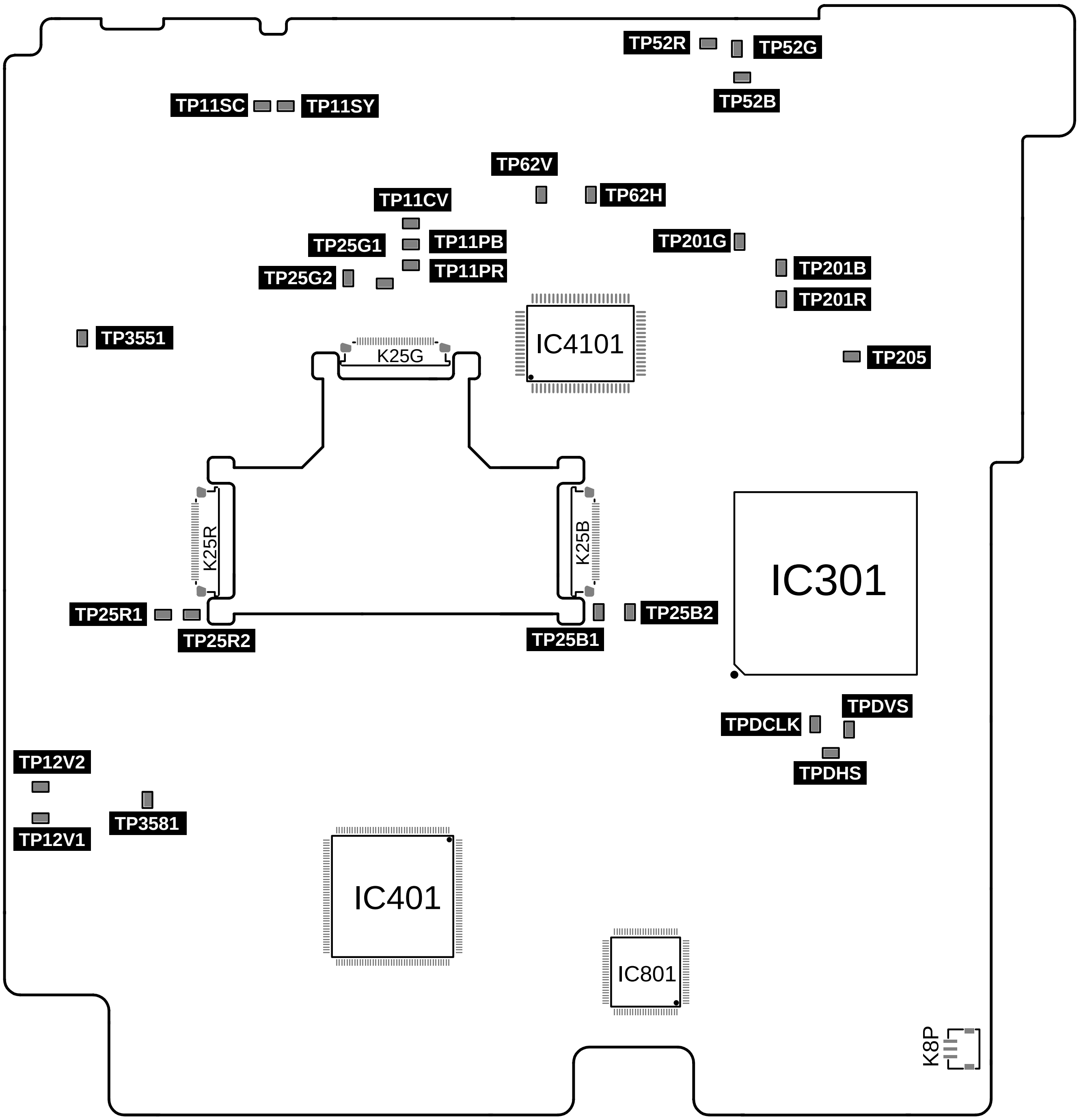
No.	Adjustment Item	Initial Value			Range	Description
28	Cinema LTI_LEVEL	0			0 ~ 3	Set this value at Cinema Mode
Group: 2	**L3E07050 (Digital Gamma, Color Shading & Timing Controller)**					
		PC	DVI,AV			
0	R_SUB_BRT	0	0		0 ~ 1023	
1	G_SUB_BRT	0	0		0 ~ 1023	
2	B_SUB_BRT	0	0		0 ~ 1023	
		PC	AV	DVI		
3	R_SUB_GAIN	573	573	492	0 ~ 1023	* Red PC/AV gain adjustment
4	G_SUB_GAIN	573	573	492	0 ~ 1023	* Green PC/AV gain adjustment
5	B_SUB_GAIN	573	573	492	0 ~ 1023	* Blue PC/AV gain adjustment
		PC, DVI Standard	AV Standard			
6	Standard G GAMMA SHIFT	415	415		Note1	* Gamma shift adjustment
7	Standard R GAMMA SHIFT	415	415		Note1	* White balance adjustment
8	Standard B GAMMA SHIFT	415	415		Note1	* White balance adjustment
9	Standard GAMMA 0	0	0		0 ~ 1023	
10	Standard GAMMA 1	210	166		0 ~ 1023	
11	Standard GAMMA 2	340	290		0 ~ 1023	
12	Standard GAMMA 3	436	406		0 ~ 1023	
13	Standard GAMMA 4	511	496		0 ~ 1023	
14	Standard GAMMA 5	574	560		0 ~ 1023	
15	Standard GAMMA 6	633	626		0 ~ 1023	
16	Standard GAMMA 7	674	672		0 ~ 1023	
17	Standard GAMMA 8	709	709		0 ~ 1023	
18	Standard GAMMA 9	740	740		0 ~ 1023	
19	Standard GAMMA 10	770	770		0 ~ 1023	
20	Standard GAMMA 11	800	800		0 ~ 1023	
21	Standard GAMMA 12	832	838		0 ~ 1023	
22	Standard GAMMA 13	884	877		0 ~ 1023	
23	Standard GAMMA 14	950	940		0 ~ 1023	
24	Standard GAMMA 15	1023	1023		0 ~ 1023	
		PC, DVI Real	AV Cinema			(Different value to Standard)
25	Real/Cinema G GAMMA SHIFT	506	507		Note1	Note1:
26	Real/Cinema R GAMMA SHIFT	512	512		Note1	
27	Real/Cinema B GAMMA SHIFT	504	504		Note1	
28	Real/Cinema GAMMA 0	512	512		0 ~ 1023	
29	Real/Cinema GAMMA 1	492	538		0 ~ 1023	
30	Real/Cinema GAMMA 2	497	524		0 ~ 1023	
31	Real/Cinema GAMMA 3	502	519		0 ~ 1023	
32	Real/Cinema GAMMA 4	507	516		0 ~ 1023	
33	Real/Cinema GAMMA 5	509	515		0 ~ 1023	
34	Real/Cinema GAMMA 6	510	512		0 ~ 1023	
35	Real/Cinema GAMMA 7	510	511		0 ~ 1023	
36	Real/Cinema GAMMA 8	510	510		0 ~ 1023	
37	Real/Cinema GAMMA 9	510	510		0 ~ 1023	
38	Real/Cinema GAMMA 10	510	510		0 ~ 1023	
39	Real/Cinema GAMMA 11	509	510		0 ~ 1023	
40	Real/Cinema GAMMA 12	508	510		0 ~ 1023	
41	Real/Cinema GAMMA 13	506	509		0 ~ 1023	
42	Real/Cinema GAMMA 14	502	502		0 ~ 1023	
43	Real/Cinema GAMMA 15	512	512		0 ~ 1023	
44	R 2	127			0 ~ 255	R Correction value of vertical line
45	G 2	127			0 ~ 255	G Correction value of vertical line
46	B 2	127			0 ~ 255	B Correction value of vertical line
47	Red MID2 Level	453			0 ~ 1023	
48	Red MID1 Level	500			0 ~ 1023	
49	Red MAX Level	576			0 ~ 1023	
50	Green MID2 Level	453			0 ~ 1023	Gray scale level adjustment
51	Green MID1 Level	500			0 ~ 1023	
52	Green MAX Level	575			0 ~ 1023	
53	Blue MID2 Level	418			0 ~ 1023	
54	Blue MID1 Level	465			0 ~ 1023	
55	Blue MAX Level	541			0 ~ 1023	
56	DVI std G GAMMA SHIFT	512			0 ~ 1023	
57	DVI std R GAMMA SHIFT	512			0 ~ 1023	
58	DVI std B GAMMA SHIFT	512			0 ~ 1023	
Group: 3	**DAC**					
0	R_VIDEO_CENTER	113			0 ~ 255	* Red Signal center adjustment
1	G_VIDEO_CENTER	113			0 ~ 255	* Green Signal center adjustment
2	B_VIDEO_CENTER	113			0 ~ 255	* Blue Signal center adjustment

No.	Adjustment Item	Initial Value	Range	Description
3	REF_R	148	0 ~ 255	∗ Red white-black level adjustment
4	REF_G	148	0 ~ 255	∗ Green white-black level adjustment
5	REF_B	148	0 ~ 255	∗ Blue white-black level adjustment
6	NRS_B	128	0 ~ 255	
7	NRS_A	135	0 ~ 255	∗ NRS adjustment
8	G_V_COM	140	0 ~ 255	∗ Green common center adjustment
9	B_V_COM	140	0 ~ 255	∗ Blue common center adjustment
10	R_V_COM	140	0 ~ 255	∗ Red common center adjustment
11	R_CLMP	63	0 ~ 255	∗ Red PC offset adjustment
12	G_CLMP	63	0 ~ 255	∗ Green PC offset adjustment
13	B_CLMP	63	0 ~ 255	∗ blue PC offset adjustment
14	R_BLK_DC	76	0 ~ 255	∗ Red pedestal adjustment
15	G_BLK_DC	76	0 ~ 255	∗ Green pedestal adjustment
16	B_BLK_DC	76	0 ~ 255	∗ blue pedestal adjustment
Group: 4 TA1318				
		15kHz / 31kHz / 33kHz / 45kHz		
0	SEP_LEV	0 / 0 / 0 / 0	0 ~ 3	
		1080i / 720p / 480p / 575i,PAL,SECAM / 480i,NTSC		
1	HD_PHASE	36 / 38 / 36 / 32 / 32	0 ~ 63	
2	V_FREQ	-	-	Read only
3	H_FREQ	-	-	
4	HD_IN	-	-	
Group: 5 LP05 (Turbo)				
0	LP05_R_GAIN	128	0 ~ 255	
1	LP05_G_GAIN	128	0 ~ 255	
2	LP05_B_GAIN	128	0 ~ 255	
3	TURBO_GAIN	19	0 ~ 255	
Group: 10 Option				
0	Lamp Time Monitor	-	-	Read only
1	RS232C Baudrate	0	0 ~ 1	0: 19200bps 1: 9600bps
2	Shootout Mode	0	0 ~ 2	1:Mode-1(Change when no signal input) 2:Mode-2(Priority of AV) 0: Disable
3	Cooling Time	3	0 ~ 15	Set cooling time period 1:30 sec. 3:90 sec. 15:450 sec. 0:On conti.
4	High-Land SW	0	0 ~ 1	0: Normal mode(Normal operation) 1: Highland mode(max speed in normal)
5	V-Sync SW	0	0 ~ 1	0:Vertical-synchronized 1:No vertical-synchronized
6	Color Shading SW	1	0 ~ 1	Color correction 0: No 1:Yes, adjustable but does no store the value
7	MCI Output Auto	1	0 ~ 1	Auto: 1, Fixed: 0
6	Keystone Option	0	0 ~ 1	Fixed limitation : 0, Change limitation to the input: 1
Group: 11 Fan Control				∗ Fan voltage adjustment
0	Fan Speed Mode	0	0 ~ 3	0: Fan control 1: Min., 2: Mid., 3: Max. it can not be memorized.
1	Fan-1 Min Data	44	0 ~ 127	Minimum output data when controlling Fans ∗
2	Fan-2 Min Data	63	0 ~ 127	Minimum output data when controlling Fans ∗
3	Fan-1 Max Data	217	128 ~ 255	Maximum output data when controlling Fans ∗
4	Fan-2 Max Data	236	128 ~ 255	Maximum output data when controlling Fans ∗
5	Temp Low	37	10 ~ 80	Decides output data of DAC for temperature
6	Temp High	45	30 ~ 80	Decides output data of DAC for temperature
7	Fan-1 Temp Error	61	30 ~ 80	Temperature which CPU judges the abnormal temperature (optical unit temperature, on Main board)
8	Fan-2 Temp Error	51	30 ~ 80	Temperature which CPU judges the abnormal temperature (outside temperature, on Temp board)
9	Fan-1 Speed Monitor	-	0 ~ 255	Read only, displays DAC output data
10	Fan-2 Speed Monitor	-	0 ~ 255	Read only, displays DAC output data
11	Temp Monitor	-	0 ~ 9999	Read only (Upper 2 byte indicates for Fan-1. Lower 2 byte indicates Fan-2)
12	Eco mode Fan-1 Min Data	44	0 ~ 127	decides minimum output data at Eco mode.
13	Eco mode Fan-2 Min Data	63	0 ~ 127	decides minimum output data at Eco mode.
14	Eco mode Fan-1 Max Data	217	128 ~ 255	decides maximum output data at Eco mode.
15	Eco mode Fan-2 Max Data	236	128 ~ 255	decides maximum output data at Eco mode.
Group: 12 PC Real / AV Cinema				
0	PC Real Contrast	32	0 ~ 63	
1	PC Real Brightness	32	0 ~ 63	
2	PC Real Red	32	0 ~ 63	
3	PC Real Green	32	0 ~ 63	
4	PC Real Blue	32	0 ~ 63	
5	PC Real Gamma	8	0 ~ 15	
6	AV Cinema Contrast	32	0 ~ 63	
7	AV Cinema Brightness	32	0 ~ 63	
8	AV Cinema Color	32	0 ~ 63	
9	AV Cinema Tint	32	0 ~ 63	
10	AV Cinema Red	32	0 ~ 63	

No.	Adjustment Item	Initial Value	Range	Description
11	AV Cinema Green	32	0 ~ 63	
12	AV Cinema Blue	32	0 ~ 63	
13	AV Cinema Sharpness	15	0 ~ 31	
14	AV Cinema Gamma	8	0 ~ 15	
Group: 500 ADC				
0	ADC R-OFFSET	64	0 ~ 255	
1	ADC G-OFFSET	64	0 ~ 255	
2	ADC B-OFFSET	64	0 ~ 255	
3	ADC R-GAIN	254	0 ~ 255	
4	ADC G-GAIN	254	0 ~ 255	
5	ADC B-GAIN	254	0 ~ 255	
Group: 510 NTSC Gakaku				
0	NTSC TOTAL DOTS	2054	0 ~ 2047	
1	NTSC DISP DOTS	800	0 ~ 2047	
2	NTSC H BACK PORCH	180	0 ~ 2047	
3	NTSC V BACK PORCH	46	0 ~ 2047	
4	NTSC DISP LINE	456	0 ~ 2047	
5	NTSC CLAMP	4	0 ~ 2047	
Group: 511 PAL Gakaku				
0	PAL TOTAL DOTS	2102	0 ~ 2047	
1	PAL DISP DOTS	800	0 ~ 2047	
2	PAL H BACK PORCH	207	0 ~ 2047	
3	PAL V BACK PORCH	62	0 ~ 2047	
4	PAL DISP LINE	533	0 ~ 2047	
5	PAL CLAMP	4	0 ~ 2047	
Group: 512 HDTV 1080i-60 Gakaku				
0	TOTAL DOTS	842	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	115	0 ~ 2047	
3	V BACK PORCH	52	0 ~ 2047	
4	DISP LINE	1048	0 ~ 2047	
5	CLAMP	5	0 ~ 2047	
Group: 513 HDTV 1080i-50 Gakaku				
0	TOTAL DOTS	1130	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	113	0 ~ 2047	
3	V BACK PORCH	64	0 ~ 2047	
4	DISP LINE	1044	0 ~ 2047	
5	CLAMP	5	0 ~ 2047	
Group: 514 HDTV 1035i Gakaku				
0	TOTAL DOTS	942	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	115	0 ~ 2047	
3	V BACK PORCH	90	0 ~ 2047	
4	DISP LINE	1006	0 ~ 2047	
5	CLAMP	5	0 ~ 2047	
Group: 515 HDTV 720p Gakaku				
0	TOTAL DOTS	1060	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	206	0 ~ 2047	
3	V BACK PORCH	36	0 ~ 2047	
4	DISP LINE	698	0 ~ 2047	
5	CLAMP	5	0 ~ 2047	
Group: 516 HDTV 575p Gakaku				
0	TOTAL DOTS	1052	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	188	0 ~ 2047	
3	V BACK PORCH	60	0 ~ 2047	
4	DISP LINE	524	0 ~ 2047	
5	CLAMP	0	0 ~ 2047	
Group: 517 HDTV 480p Gakaku				
0	TOTAL DOTS	1006	0 ~ 2047	
1	DISP DOTS	800	0 ~ 2047	
2	H BACK PORCH	167	0 ~ 2047	
3	V BACK PORCH	46	0 ~ 2047	
4	DISP LINE	451	0 ~ 2047	
5	CLAMP	0	0 ~ 2047	

Test Points and Locations

● **MAIN BOARD**



■ Troubleshooting

No Power

The possible causes of No Power are listed below. Please check following and refer to power supply and protection circuits diagram in the figure opposite.

1. Stop the operation of power supply circuit due to detection of abnormality.

- Detected the abnormality on the secondary power supply lines.
  Power failure detection diodes detect an abnormal voltage on the power supply. Check the shortage of secondary circuits, ICs, condensers, etc.
- Detected the operation stop of cooling fans.
  Power failure detection diodes detect the fan operation stop. Check Fans FN901, FN902, FN903, FN904, FN905 and FN906
  Check fan's power supply lines and detection diodes and transistors D69A, D69B, D69C and Q69A
- Detected the abnormal temperature rise inside the projector.
  Temperature sensor ICs detect abnormal temperature. Check peripheral circuits and sensor ICs IC4881 and IC2881.
  Thermal switch (TSW611) detects abnormal temperature. Check peripheral circuits and TSW611.
  TSW611.................... open in normal
  TSW611 shorts when the peripheral temperature is over 90°C.
  Thermal switch (SW902) detects abnormal temperature. Check peripheral circuits and SW902.
  SW902...................... short in normal
  SW902 opens when peripheral temperature is over 100°C.
- Detected the abnormality on the lamp ballast unit.
  The lamp ballast unit outputs error signal (LAMP_ERR) to pin 47 of IC801.
  LAMP_ERR .... High in abnormal
- Detected the over load/over voltage on power supply circuit.
  Feedback circuits detect over load or over voltages. Check PC641, PC642 and peripheral circuits.
- Operated the mechanical protect on the Interlock switch (SW904). Check lamp cover fixed correctly.
- Fuse (F601) open.

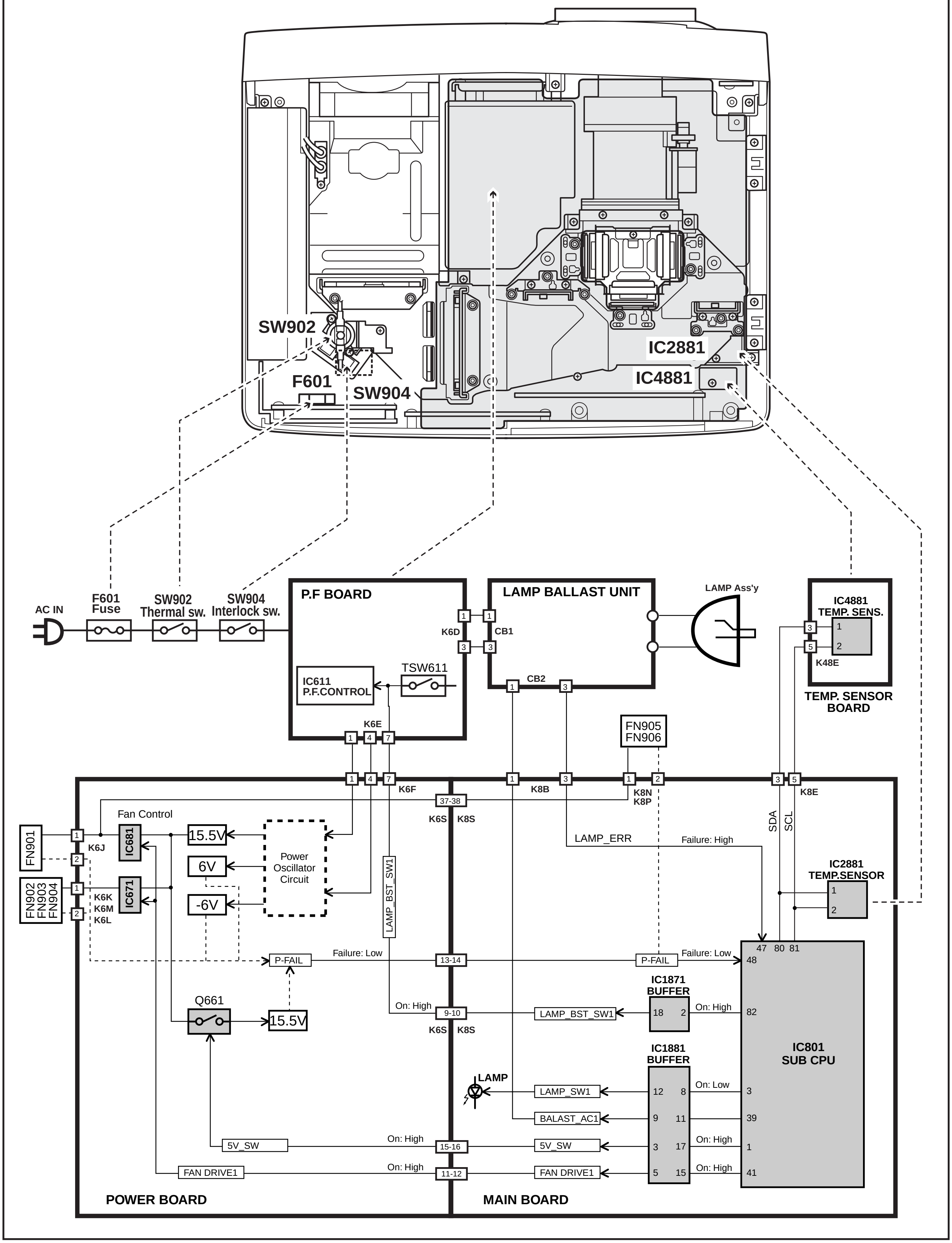
2. Abnormality occurs on drive signals for power or lamp circuit.

- Abnormality on power starter signals (POWER, 5V_SW).
  POWER signal is output from pin 1 of IC801 and sent to pin 17 of IC1881, and output from pin 3 by the name of 5V_SW signal. 5V_SW signal drives 15.5V and 9VMCI power supply circuits on the power board.
  POWER/5V_SW .... High in power on
  Check POWER and 5V_SW signals, 9V regulator circuit Q65A, Q65B, Q65C, IC65A and peripheral circuit, 15.5V switch circuit Q661, Q662 and peripheral circuit on the Power Board.
- Abnormality on lamp ballast drive signal (BALLAST_AC).
  BALLAST_AC signal is output from pin 39 of IC801 and sent to pin 11 of IC1881, and output from pin 9 by the name of BALLAST_AC1 signal. BALLAST_SW1 signal drives the lamp ballast unit.
  Check BALLAST_AC and BALLAST_AC1 signals and lamp ballast unit.
- Abnormality on fan drive signal (FAN DRIVE).
  FAN DRIVE signal is output from pin 41 of IC801 and sent to pin 15 of IC1881, and output from pin 5 by the name of FAN DRIVE1 signal. FAN DRIVE1 signal drives fan supply voltages (12V/12V1) on the power board.
  FAN DRIVE/
  FAN DRIVE1 .... High in power on
  Check FAN DRIVE/FAN DRIVE1 signals, 12V regulator circuits IC681, Q681, Q682, Q66A, IC671, Q671, Q672 and peripheral circuits.
- Abnormality on power drive signal (LAMP_BST_SW).
  LAMP_BST_SW signal is output from pin 82 of IC801 and sent to pin 2 of IC1871, and output from pin 18 by the name of LAMP_BST_SW1 signal. LAMP_BST_SW1 signal drives the power factor control IC on the P.F. board through the Power board.
  LAMP_BST_SW/
  LAMP_BST_SW1 .... High in power on
  Check LAMP_BST_SW and LAMP_BST_SW1 signal, photo-coupler PC643, transistors Q651, Q641 and peripheral circuits.

3. Abnormality occurs on the power circuit.

- Abnormality on power primary circuit
  Check Line filters, L601, L602, D614, L611, IC631, D632, etc.
- Abnormality on power secondary circuit
  Check D651, D652, D653, IC651, etc.

Power supply drive and protection diagrams and locations



No Picture

The possible causes of No Picture are listed below. Please check following and refer to video signal processing diagrams in the figure opposite.

1. No picture from Video source

Composite Video Input

Check composite video signal at pins 45 and 46 of K10U on AV Board and K3U on Main Board.
Check Y, C signals at pins 7 and 9 of IC2101.
Check Y, C signals at pins 5 and 7 of IC1101

S-Video Input

Check S-video signals at pins 39, 40 (Y), 41, 42 (C) of K10U and K3U.
Check Y, C signals at test points TP11SC and TP11SY.
Check Y, C signals at pins 43 and 44 of IC1101.

Component Input

Check component signals at pins 49, 50(Pb), 51, 52 (Pr) of K10U and K3U.
Check component signals (Y, Pr, Pb) at test points TP11CV, TP11PB and TP11PR.

All of video signals

Check component signals (Y, Cr, Cb) at pins 21, 22 and 23 of IC1101.
Check component signals (Y, Cr, Cb) at pins 67, 68 and 69 of IC4101.
Check component signals (Y, Pr, Pb) at pins 73, 74 and 75 of IC4101.
Check Sync signals (AV_HSYNC, AV_VSYNC) at pins 4 and 9 of IC1101.
Check Sync signals (AV_HSYNC, AV_VSYNC) at pins 65 and 66 of IC4101.
Check RGB signals at pin 35, 37 and 39 of IC4101.
Check RGB signals at pins 14, 4 and 15 of IC3101.
Check blanking signal at pin 9, 10, 11 of IC3101.
Check RGB signals at pins 1, 3 and 5 of IC5241.
Check Sync signals (AV_HSYNC, AV_VSYNC) at pins 2 and 12 of IC6261.
Check AV/PC switching signal at pin 22 of IC5241 and pins 10 and 11 of IC6261.
AV : Low, PC : High

2. No picture from Computer source

Check RGB signals at pins 3-4, 7-8 and 11-12 of K10T on AV Board and K3T on Main Board.
Check Sync signals (PC_HSYNC, PC_VSYNC) at pins 15-16 and 19-20) of K10T on AV Board and K3T on Main Board.
Check RGB signals at pins 12, 10 and 8 of IC5241.
Check Sync signals at pins 1 and 13 of IC6261.
Check AV/PC switching signal at pin 22 of IC5241 and pins 10 and 11 of IC6261.
AV : Low, PC : High

3. No picture from both of Video and Computer sources.

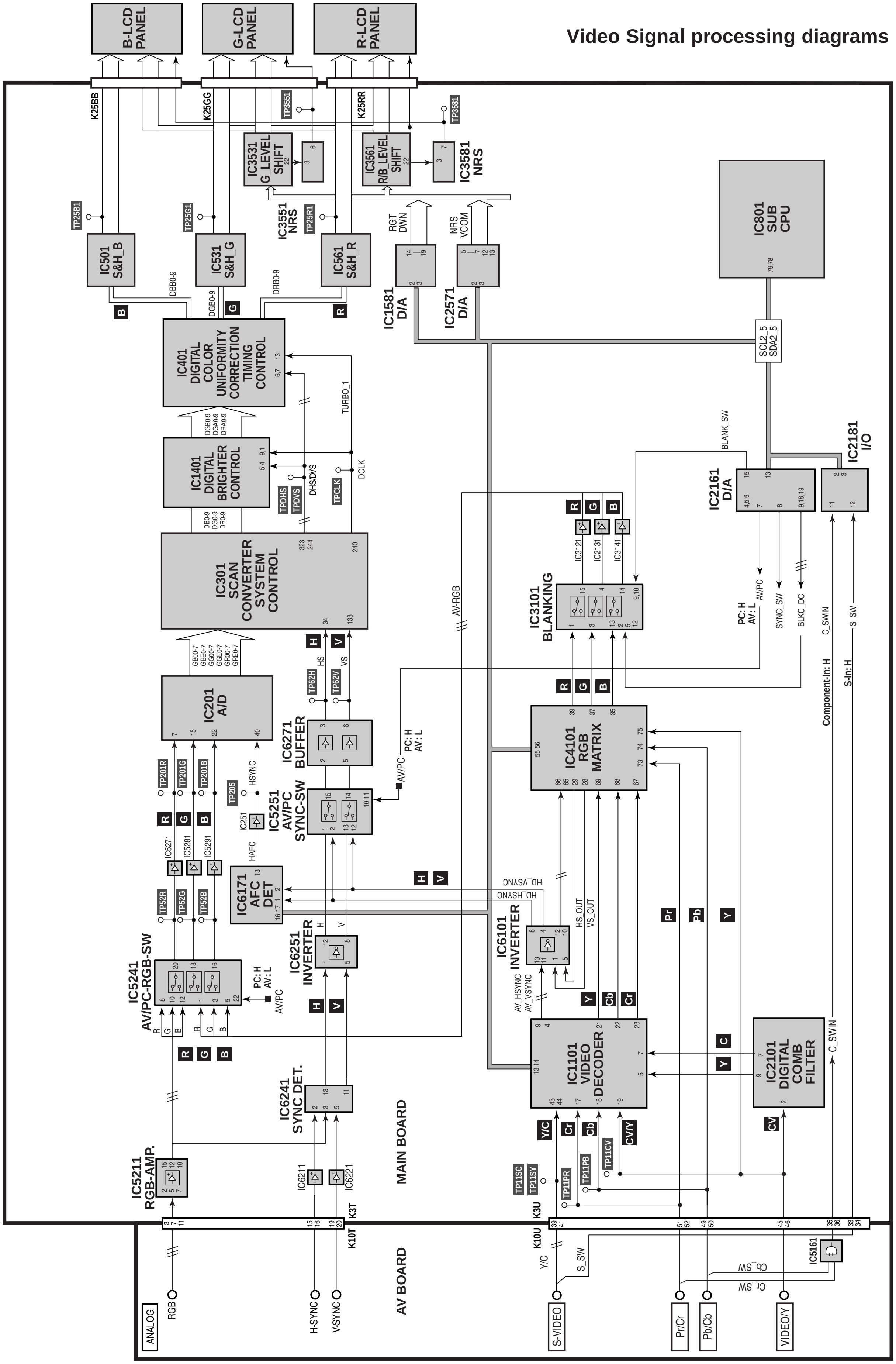
Check RGB signals at test points TP52R, TP52G and TP52B.
Check RGB signals at test points TP201R, TP5201G and TP201B.
Check HSYNC signal at test point TP205.
Check Sync signals at test points at TP62H and TP62V.

4. No picture from all of sources

Check RGB S&H signals at test points TP25B1, TP25B2, TP25G1, TP25G2, TP25R1 and TP25R2.
Check NRS signals at test points TP3551 and TP3581.
Check power supply circuit 15.5V and 15VL and peripheral circuit.
Check ICs IC501, IC531, IC561, IC1501, IC1531, IC1561, IC3501, IC3531, IC3561, IC801, IC301, IC401and peripheral circuits.

SIGNAL	K10T/K3T	SIGNAL	K10U/K3U
V-Sync	19-20	Video	45-46
H-Sync	15-16	S-C	41-42
B	11-12	S-Y	39-40
G	7-8	PB	49-50
R	3-4	PR	51-52

Video Signal processing diagrams



No Sound

1. No audio signals at AV input circuit.

Check audio signals at pins14 and 15 of IC5011 on AV Board. Check IC5011 and peripheral circuits.

2. Incorrect operation of VIDEO/COMPUTER mode switching.

Check AV/PC switching signal at pins 10 and 11 of IC5011. Check IC5011, IC801 and switching signal.

AV : Low, PC : High

3. No audio output signal at speaker.

Check audio signal at pins 1 and 3 of K8F on Main Board.
Check MUTE signal at pin 4 of IC031.

Mute On : High

Check MUTE signal at pin 7 of IC1831, pins 7 and 13 of IC1881, and peripheral circuit.

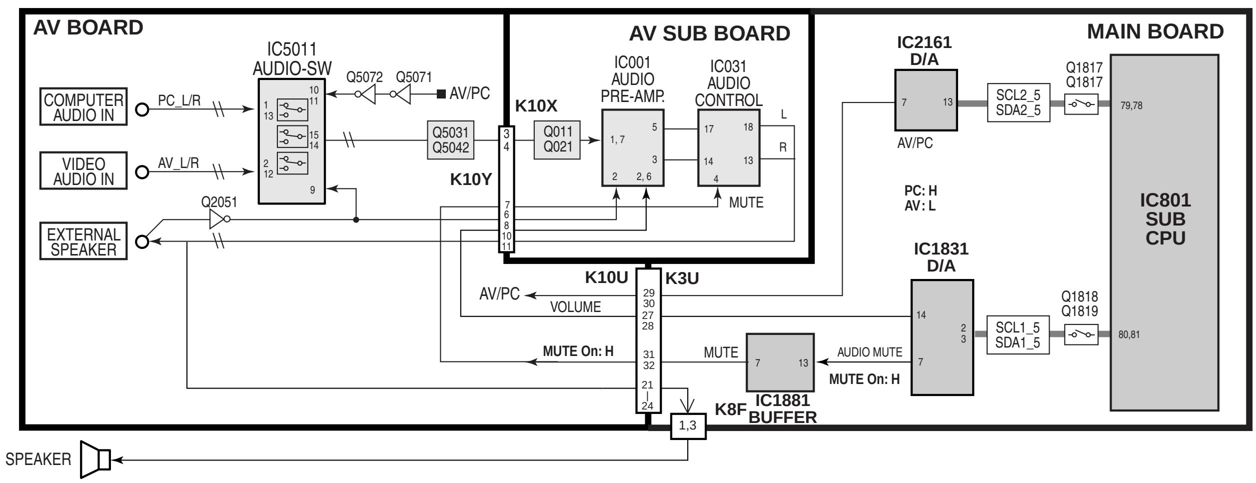
Mute On : High

Check sound volume signal at pins 27, 28 of K10U, and pin 14 of IC1831.Check IC IC001, IC031 and peripheral circuit.

Volume Min.: Low

4. No power supply at audio circuit.

Check 6V(6V AUDIO) power supply line.



Lens Motor Problems

1. No drive signals supplied at motors

Check drive signals at pins 1 to 4 of K6U on Power Board. Check ICs IC5501, IC5551 and peripheral circuits. Check motor drive power supply (9VMCI).

2. No drive signals supplied at motor drive ICs.

Check drive signals at pins 3-4 (ZOOM), 5-6 (FOCUS) of k6S. Check IC801.

3. No drive signals output from CPU.

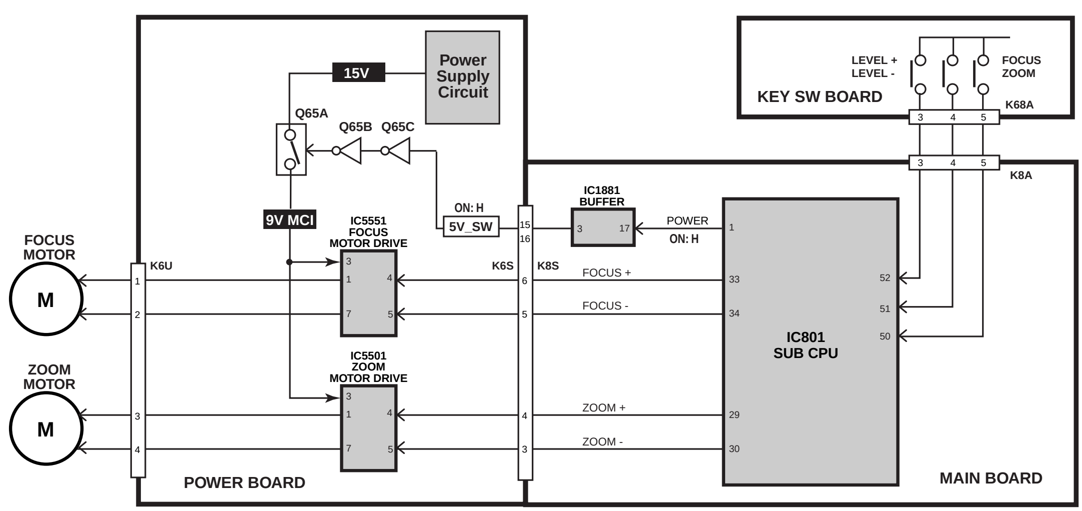
Check drive signals at pins 29,30, 33, 34 of IC801(SUB CPU). Check IC801.

4. No key switch signals input to CPU.

Check signals at pins 50 to 52 of IC801 when pressing the key buttons. Check key buttons.

Logic Table of IC5501/IC5551

Input		Output		Operation
4	5	7	1	
H	L	L	H	Forward drive
L	H	H	L	Reverse drive
H	H	L	L	Braking
L	L	-	-	Stand by



■ Control Port Functions

● System Control & I/O Port Table (IC801)

Pin No.	Name	Function Name	Function	I/O	Action
1	PE5/D5	POWER_SW	Power_SW	O	H: On
2	PE6/D6	SYS SW	Peripheral IC power supply SW	O	L: on
3	PE7/D7	LAMP_SW	Lamp LED	O	H: On
4	PD0/D8	DATA0	Data Bus 0	I/O	-
5	PD1/D9	DATA1	Data Bus 1	I/O	-
6	PD2/D10	DATA2	Data Bus 2	I/O	-
7	PD3/D11	DATA3	Data Bus 3	I/O	-
8	PD4/D12	DATA4	Data Bus 4	I/O	-
9	PD5/D13	DATA5	Data Bus 5	I/O	-
10	PD6/D14	DATA6	Data Bus 6	I/O	-
11	PD7/D15	DATA7	Data Bus 7	I/O	-
12	CVCC	CVCC	Power supply	-	-
13	PC0/A0	ADDRESS0	Address Bus 0	O	-
14	VSS	VSS	Vss	-	-
15	PC1/A1	ADDRESS1	Address Bus 1	O	-
16	PC2/A2	ADDRESS2	Address Bus 2	O	-
17	PC3/A3	ADDRESS3	Address Bus 3	O	-
18	PC4/A4	ADDRESS4	Address Bus 4	O	-
19	PC5/A5	ADDRESS5	Address Bus 5	O	-
20	PC6/A6	ADDRESS6	Address Bus 6	O	-
21	PC7/A7	ADDRESS7	Address Bus 7	O	-
22	PB0/A8/TIOCA3	ADDRESS8	Address Bus 8	O	-
23	PB1/A9/TIOCB3	ADDRESS9	Address Bus 9	O	-
24	PB2/A10/TIOCC3	ADDRESS10	Address Bus 10	O	-
25	PB3/A11/TIOCD3	ADDRESS11	Address Bus 11	O	-
26	PB4/A12/TIOCA4	ADDRESS12	Address Bus 12	O	-
27	PB5/A13/TIOCB4	ADDRESS13	Address Bus 13	O	-
28	PB6/A14/TIOCA5	ADDRESS14	Address Bus 14	O	-
29	PB7/A15/TIOCB5	ZOOM +	Zoom +	O	L: Zoom +
30	PA0/A16	ZOOM -	Zoom -	O	L: Zoom -
31	PA1/A17/TxD2	Tx	RS232C TxD	O	L: active
32	PA2/A18/RxD2	Rx	RS232C RxD	I	L: active
33	PA3/A19/SCK2	FOCUS +	Focus +	O	L: Focus +
34	P10/TIOCA0/A20	FOCUS -	Focus -	O	L: Focus -
35	P11/TIOCB0/A21	R/C	Remote control signal input	I	L: active
36	P12/TIOCC0/TCLKA/A22	USB_RESET	USB Reset signal output	O	L: active
37	P13/TIOCD0/TCLKB/A23	USB_BRST	USB_BRST	O	L: On"
38	P14/TIOCA1/IRQ0	SCLK	Serial clock output	O	H: active
39	P15/TIOCB1/TCLKC	BLAST_AC	Lamp Ballast control signal	O	H: on
40	P16/TIOCA2/IRQ1	TXD_SW	TXD_SW	O	H: PW-Main CPU
41	P17/TIOCB2/TCLKD	FAN ON/OFF	Fan Drive output	O	H: on
42	AVSS	Avss	A/D ground	-	-
43	P97/DA1	PIXEL WRITE	PIXEL write	I	L: PW write
44	P96/DA0	TEMP_DET	TEMP DET	I	L: Temperature abnormal
45	P47/AN7	OPT2	Option input	I	L: XGA H: SVGA
46	P46/AN6		Not used	I	
47	P45/AN5	LAMP_ERR	Lamp Error	I	H: Lamp not lit
48	P44/AN4	POWER_FAIL	Power Fail (Abnormal less than 2V)	I	Abnormal less that 1V
49	P43/AN3	OPT1	Destination option	I	
50	P42/AN2	KEY3	Key Input3 (A/D Input)	I	
51	P41/AN1	KEY2	Key Input2 (A/D Input)	I	
52	P40/AN0	KEY1	Key Input1 (A/D Input)	I	
53	Vref	Vref	Reference voltage for analog	-	-
54	AVCC	AVCC	A/D power supply	-	-
55	MD0	MD0	Operation mode control 0	I	Fixed L
56	MD1	MD1	Operation mode control 1	I	Fixed H
57	OSC2	OSC2	Sub-clock output (Not used)	O	open
58	OSC1	OSC1	Sub-clock output (Not used)	I	Connected to GND
59	RES	RESET	Reset input	I	Reset L to H
60	NMI	NMI	Non-maskable input (not used)	I	Fixed H
61	STBY	STBY	Stand-by	I	-
62	VCC	VCC	Vcc	-	-
63	XTAL	XTAL	Oscillator input	I	-
64	VSS	VSS	GND	-	-
65	EXTAL	EXTAL	Oscillator output	O	-
66	FWE	FEW	Write enable input for Flash ROM	I	H: Enable

Pin No.	Name	Function Name	Function	I/O	Action
67	MD2	MD2	Operation mode control 2	I	Fixed H
68	PF7/¢	¢	¢ output	O	-
69	PF6/AS	AS	AS output	O	-
70	PF5/RD	RD	Read signal	O	Control for SRAM
71	PF4/HWR	HWR	Write signal (upper 8 bit)	O	Control for SRAM
72	PF3/LWR/ADTRG/IRQ3	IRO_CS	Color uniformity correction (E7050) Chip Select	O	L: active
73	PF2/WAIT	TURBO_CS	Turbo gate array Chip Select	O	H: active
74	PF1/BACK/BUZZ	SDA 4	IIC Bus 4 SDA	I/O	L: active
75	PF0/BREQ/IRQ2	FLASH_MODE	FWE control	O	
76	P30/TxD0	PW TX	PW365 TxD	O	L: active
77	P31/RxD0	PW RX	PW365 RxD	I	L: active
78	P32/SCK0/SDA1/IRQ4	SDA 2	IIC Bus 2 SDA	I/O	L: active
79	P33/TxD1/SCL1	SCL 2	IIC Bus 2 SCL	O	L: active
80	P34/RxD1/SDA0	SDA 1	IIC Bus 1 SDA (EEPROM,DAC-1)	I/O	L: active
81	P35/SCK1/SCL0/IRQ5	SCL 1	IIC Bus 1 SCL (EEPROM,DAC-1)	O	L: active
82	P36	BLAST_SW	Lamp ballast 400VON/OFF	O	H: on
83	P77/TXD3	MCI TX	Viewer TxD	O	L: active
84	P76/RXD3	MCI RX	Viewer RxD	I	L: active
85	P75/TMO3/SCK3	SCL 4	IIC Bus 4 SCL	O	L: active
86	P74/TMO2/MRES	M-RESET	Manual reset	I	L: reset
87	P73/TMO1/CS7	PW_IN0	PW365 data input 0	I	
88	P72/TMO0/CS6	PW_IN1	PW365 data input 1	I	
89	P71/TMRI23/TMCI23/CS5	OPT_ECO	Eco Mode Option	I	
90	P70/TMRI01/TMCI01/CS4	OPT_DVI	DVI Option	I	
91	PG0/IRQ6	SDATA	Serial data output	O	L: active
92	PG1/CS3/IRQ7	USB_INTR	USB interrupt signal input	I	L active
93	PG2/CS2	CS 2	SRAM Chip Select	O	L: active
94	PG3/CS1	CS 1	USB Chip Select	O	L: active
95	PG4/CS0	CS 0	Not used	O	Fixed L
96	PE0/D0	SDA 3	IIC Bus 3 SDA	I/O	L: active
97	PE1/D1	SCL 3	IIC Bus 3 SCL	O	L: active
98	PE2/D2	PW_OUT0	PW365 Data output 0	O	
99	PE3/D3	PW_OUT1	PW365 Data output 1	O	
100	PE4/D4	PW_RESET	PW365 Reset output	O	Reset L -> H -> L

● IIC Bus I/O Expander (IC1851) Port Functions

Pin No.	Name	Function	Action	I/O
1	S	Reset	Open	-
2	SCL	IIC SCL	Active “L”	-
3	SDA	IIC SDA	Active “L”	-
4	D0	CARD_IN	L: CARD H: No CARD	IN
5	D1	VIEWER_ON	L: VIEWER Unit exist	IN
6	D2	SCDT1	DVI Sync. detection H: DVI	IN
7	D3	TURBO_LED	H: on L: off	OUT
8	VSS	GND	-	-
9	D4	WARNING_LED	H: on L: off	OUT
10	D5	LAMPREP_LED	H: on L: off	OUT
11	D6	READY_LED	H: on L: off	OUT
12	D7	Not used	Fixed “L”	OUT
13	VDD	5 V	Vcc	-
14	CS2	Chip Select 2	Fixed “L”	-
15	CS1	Chip Select 1	Fixed “L”	-
16	CS0	Chip Select 0	Fixed “H”	-

● IIC Bus I/O Expander (IC2181) Port Functions

Pin No.	Name	Function	Action	I/O
1	S	Reset	Open	-
2	SCL	IIC SCL	Active “L”	-
3	SDA	IIC SDA	Active “L”	-
4	D0	MOD 2	Composite NTSC4.43, PAL60: H else: L	OUT
5	D1	MOD 1	Fixed “L”	OUT
6	D2	PNR	NTSC, NTSC4.43: L else: H	OUT
7	D3	NTPL 2	PAL-M, PAL-N: H else: L	OUT
8	VSS	GND	-	-
9	D4	NTPL 1	PAL, PAL-N: H else: L IN	
10	D5	4.43 TRAP	Composite SECAM, NTSC4.43, PAL60: L, else: H	OUT
11	D6	C -SWIN	Component signal detection (L: Component)	IN
12	D7	S _ SW	S signal detection (L: S-Input)	IN
13	VDD	5 V	Vcc(5V)	-
14	CS2	Chip Select 2	Fixed “L”	-
15	CS1	Chip Select 1	Fixed “L”	-
16	CS0	Chip Select 0	Fixed “L”	-

● IIC Bus DA Converter (IC1831) Port Functions

Pin No.	Name	Function	Action
1	R	Reset	Fixed “H”
2	SCL	IIC SCL	Active “L”
3	SDA	IIC SDA	Active “L”
4	AO7	FAN_CONT_1	0xFFh:Min 0x00h:Max
5	AO8	FAN_CONT_2	0xFFh:Min 0x00h:Max
6	AO9	EDIDEN	L: H8 side H: PC side
7	AO10	AUDIOMUTE	L: Mute Off H: Mute On
8	AO11	PWRDN0	AD Power down (L:DVI/MCI H:PC)
9	AO12	DCOM_OFF	Digital Comb Filter Usage L: at composite SECAM, NTSC4.43, PAL60
10	VrefL		D/A converter lower ref. voltage Connect to GND
11	VrefU1		D/A converter upper ref. voltage (CH7~CH12) Vcc
12	GND	GND	GND
13	VrefU2		D/A converter upper ref. voltage (CH1~CH6) Vcc
14	AO1	VOL_CNT	Control sound output volume, L: minimum
15	AO2	CG1_CG2	L: CG1, H: CG2
16	AO3	MOUSE	Air mouse On/Off H: On L: Off
17	AO4	MOUSE_RESET	Air mouse CPU reset Reset start: H->L->H
18	AO5	TURBO +	Turbo motor control (+) L: On
19	AO6	TURBO -	Turbo motor control (-) L: On
20	Vcc	Digital power supply	
21	Vdd	Analog power supply	
22	CS2	Chip Select 2	Fixed “H”
23	CS1	Chip Select 1	Fixed “H”
24	CS0	Chip Select 0	Fixed “L”

● IIC Bus DA Converter (IC2161) Port Functions

Pin No.	Name	Function	Action
1	R	Reset	Fixed "H"
2	SCL	IIC SCL	Active "L"
3	SDA	IIC SDA	Active "L"
4	AO7	RCLP	R Signal clamp reference voltage
5	AO8	GCLP	G Signal clamp reference voltage
6	AO9	BCLP	B Signal clamp reference voltage
7	AO10	AV/PC	AV/PC switch (L: AV H: PC)
8	AO11	SYNC_SW	Fixed "H"
9	AO12	G_BLK_DC	Video G signal pedestal voltage
10	VrefL		D/A converter lower ref. voltage Connected to GND
11	VrefU1		D/A converter upper ref. voltage (CH7~CH12) Vcc(5V)
12	GND	GND	GND
13	VrefU2		D/A converter upper ref. voltage(CH1~CH6) Vcc(5V)
14	AO1	SCP SW	Sandcastle pulse SW Video/S-Video/480i/575i: L else: H
15	AO2	BLANK SW	H Blank width SW 1080i/1035i/720p/480p/575p: H else: L
16	AO3	MACRO	H: PC, AV(1080i50Hz) L: AV
17	AO4	CBAL_SW	Color uniformity correction SW
18	AO5	B_BLK_DC	Video B signal pedestal voltage
19	Ao6	R_BLK_DC	Video R signal pedestal voltage
20	Vcc	Digital power supply	Vcc(5V)
21	Vdd	Analo gpower supply	Vcc(5V)
22	CS2	Chip Select 2	Fixed "L"
23	CS1	Chip Select 1	Fixed "H"
24	CS0	Chip Select 0	Fixed "H"

● IIC Bus DA Converter (IC1581) Port Functions

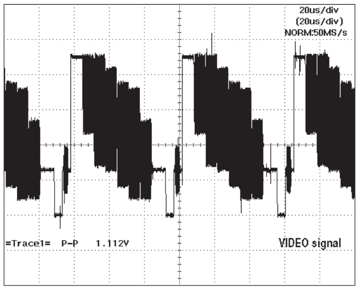
Pin No.	Name	Function	Action
1	R	Reset	Fixed "H"
2	SCL	IIC SCL	Active "L"
3	SDA	IIC SDA	Active "L"
4	AO7	REF_B	D/A reference voltage
5	AO8	REF_G	D/A reference voltage
6	AO9	REF_R	D/A reference voltage
7	AO10	Not used	0V fixed
8	AO11	Not used	0V fixed
9	AO12	Not used	0V fixed
10	VrefL		D/A converter lower ref. voltage Connected to GND
11	VrefU1		D/A converter upper ref. voltage (CH7~CH12) Vcc(5V)
12	GND	GND	GND
13	VrefU2		D/A converter upper ref. voltage (CH1~CH6) Vcc(5V)
14	AO1	B-CENT	Video center voltage
15	AO2	G-CENT	Video center voltage
16	AO3	R-CENT	Video center voltage
17	AO4	DWN	Panel control signal
18	AO5	RGT	Panel control signal
19	AO6	XRGT	Panel control signal
20	Vcc	Digital power supply	Vcc(5V)
21	Vdd	Analog power supply	Vcc(5V)
22	CS2	Chip Select 2	Fixed "L"
23	CS1	Chip Select 1	Fixed "L"
24	CS0	Chip Select 0	Fixed "L"

● IIC Bus DA Converter (IC2571) Port Functions

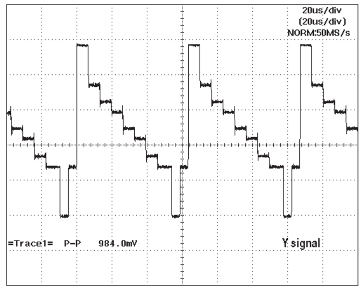
Pin No.	Name	Function	Action
1	R	Reset	Fixed "H"
2	SCL	IIC SCL	Active "L"
3	SDA	IIC SDA	Active "L"
4	AO5	Not used	
5	AO6	VCOMR	
6	AO7	VCOMG	
7	AO8	VCOMB	
8	VrefL		D/A converter lower ref. voltage Connected to GND
9	VrefU1		D/A converter upper ref. voltage (CH5~CH8) Connected to Vcc
10	GND	GND	GND
11	VrefU2		D/A converter upper ref. voltage (CH1~CH4) Connected to Vcc
12	AO1	NRSB	
13	AO2	NRSA	
14	AO3	Not used	
15	AO4	Not used	
16	Vcc	5 V	Vcc(5V)
17	Vdd	5 V	Vdd(5V)
18	CS2	Chip Select 2	Fixed "L"
19	CS1	Chip Select 1	Fixed "L"
20	CS0	Chip Select 0	Fixed "H"

■ Waveforms

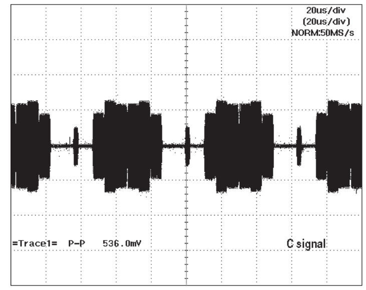
VIDEO-IN



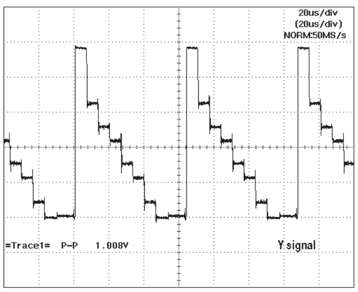
Y-IN <IC1101-5>



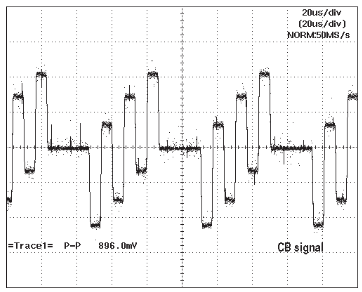
C-IN <IC1101-7>



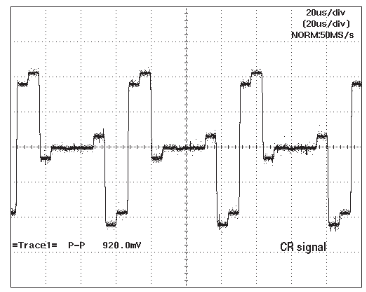
Y-OUT <IC1101-21>



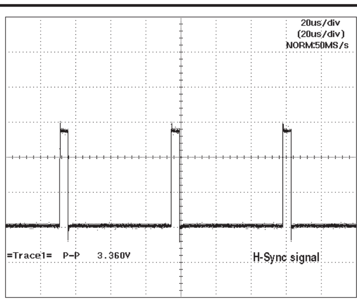
CB-OUT <IC1101-22>



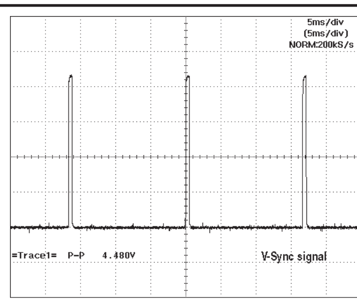
CR-OUT <IC1101-23>



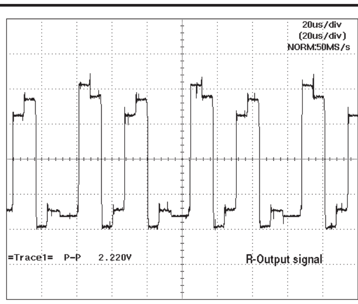
H-SYNC OUT <IC1101-9>



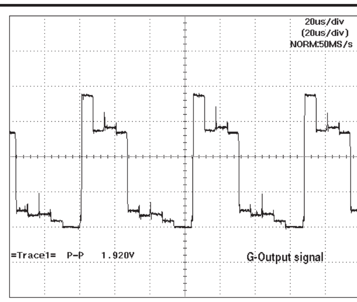
V-SYNC OUT <IC1101-4>



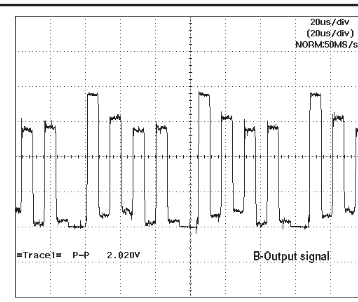
R-OUT <IC4101-35>



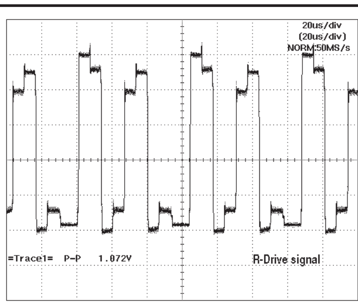
G-OUT <IC4101-37>



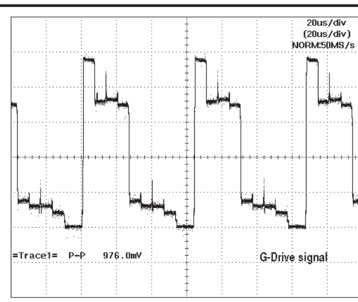
B-OUT <IC1101-7>



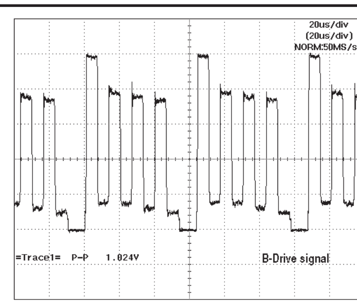
R-DRIVE <TP52R/TP201R>

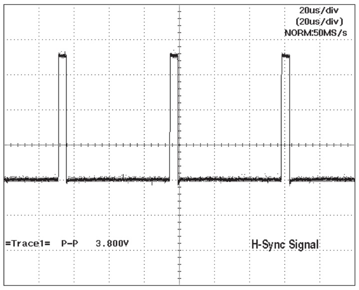
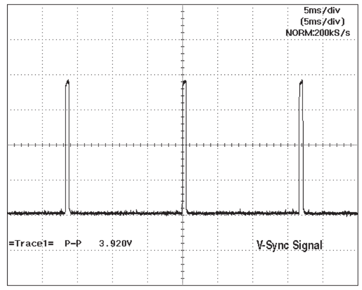
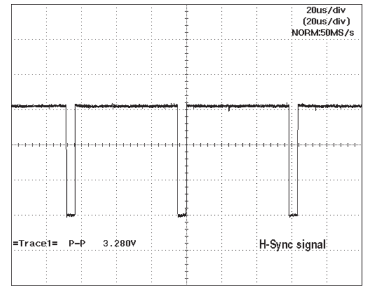
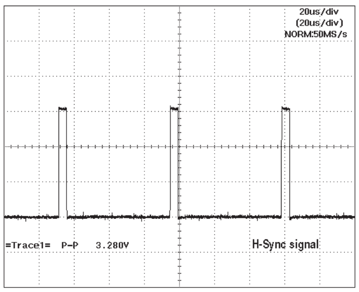
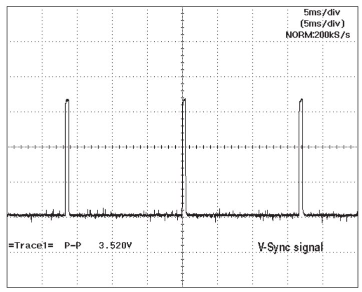
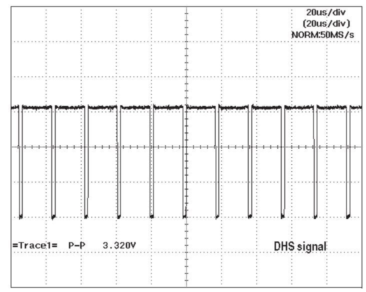
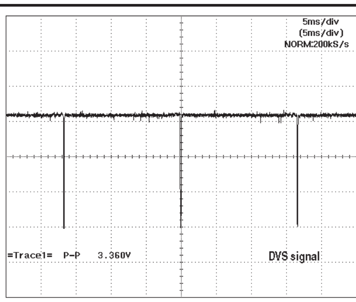
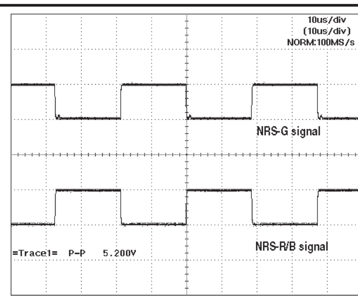
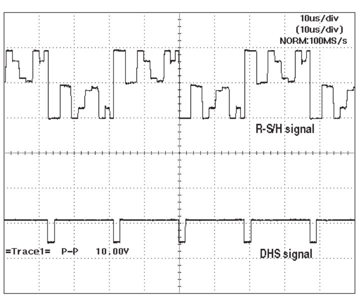
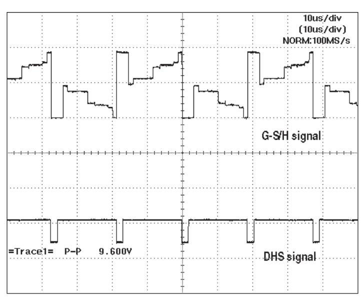
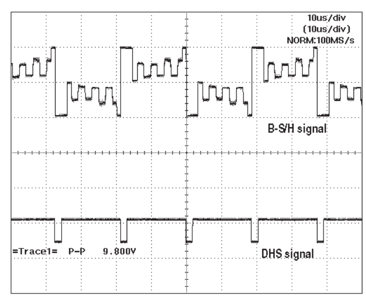
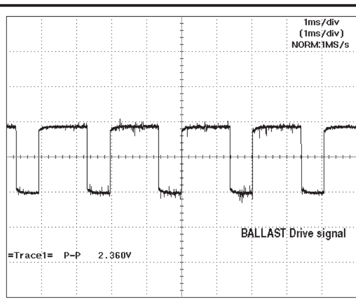


G-DRIVE <TP52G/TP201G>



B-DRIVE <TP52B/TP201G>



H-SYNC OUT <IC4101-29>	V-SYNC OUT <IC4101-28>	H-SYNC IN <TP205>
		
H-SYNC DRIVE <TP62H>	**V-SYNC DRIVE <TP62V>**	**DHS <TPDHS>**
		
DVS <TPDVS>	**NRS <TP3551/TP3581>**	
		
R-S&H OUT <TP25R1/TP25R2>	**G-S&H OUT <TP25G1/TP25G2>**	**B-S&H OUT <TP25B1/TP25B2>**
		
BALLAST SW <TP28L>		
		

■ Cleaning

After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean the inside of optical unit.

Remove dust and other particles using air spray. If dirt cannot be removed by air spray, disassemble and clean the optical unit.

Cleaning with air spray

1. Remove the cabinet top following to "Mechanical Disassemblies".
2. Clean up the LCD panel and polarizing plate by using the air spray from the cabinet top opening.

Caution:
Use a commercial (inert gas) air spray designed for cleaning camera and computer equipment. Use a resin-based nozzle only. Be vary careful not to damage optical parts with the nozzle tip. Never use any kind of cleanser on the unit. Also, never use abrasive materials on the unit as this may cause irreparable damage.

Disassembly Cleaning

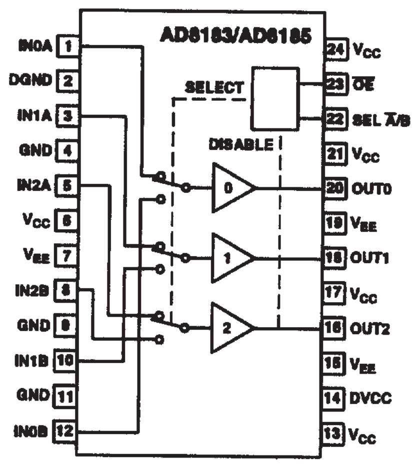
Disassembly cleaning method should only be performed when the unit is considerable dirty and cannot be sufficiently cleaned by air spraying alone.
Be sure to readjust the optical system after performing disassembly cleaning.

1. Remove the cabinet top and main units following to "Mechanical Disassemblies".
2. Remove the optical base top following to "Optical Unit Disassemblies". If the LCD panel needs cleaning, remove the LCD panel unit following to "LCD panel replacement".
3. Clean the optical parts with a soft cloth. Clean extremely dirty areas using a cloth moistened with alcohol.

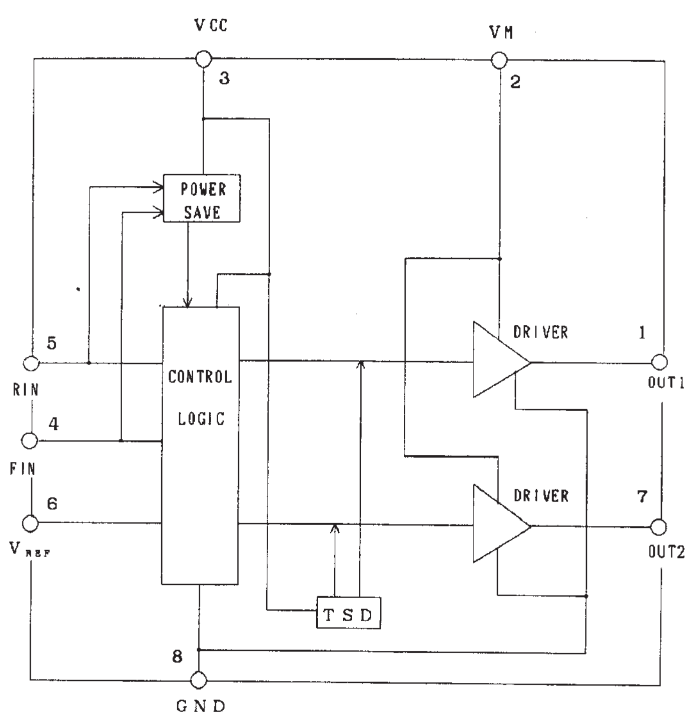
Caution:
The surface of the optical components consists of multiple dielectric layers with varying degrees of refraction. Never use organic solvents (thinner, etc.) or any kind of cleanser on these components.
Since the LCD panel is equipped with an electronic circuit, never use any liquids (water, etc.) to clean the unit. Use of liquid may cause the unit to malfunction.

■ IC Block Diagrams

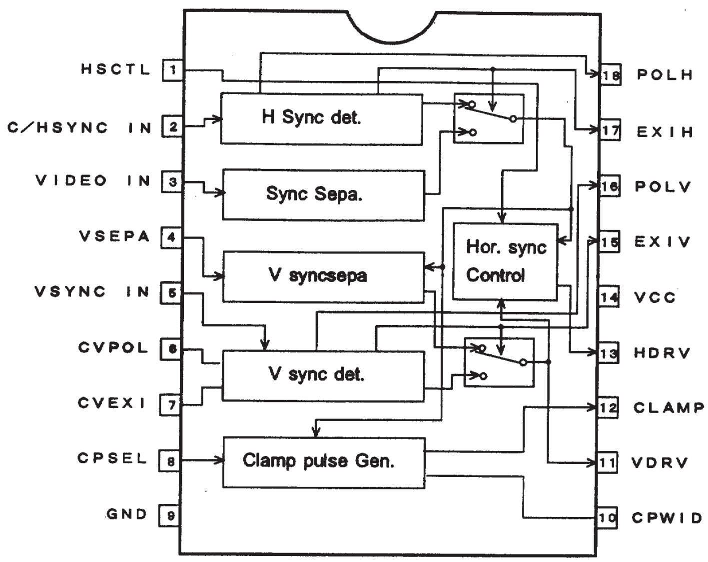
● AD8183ARU <Selector, IC5241>



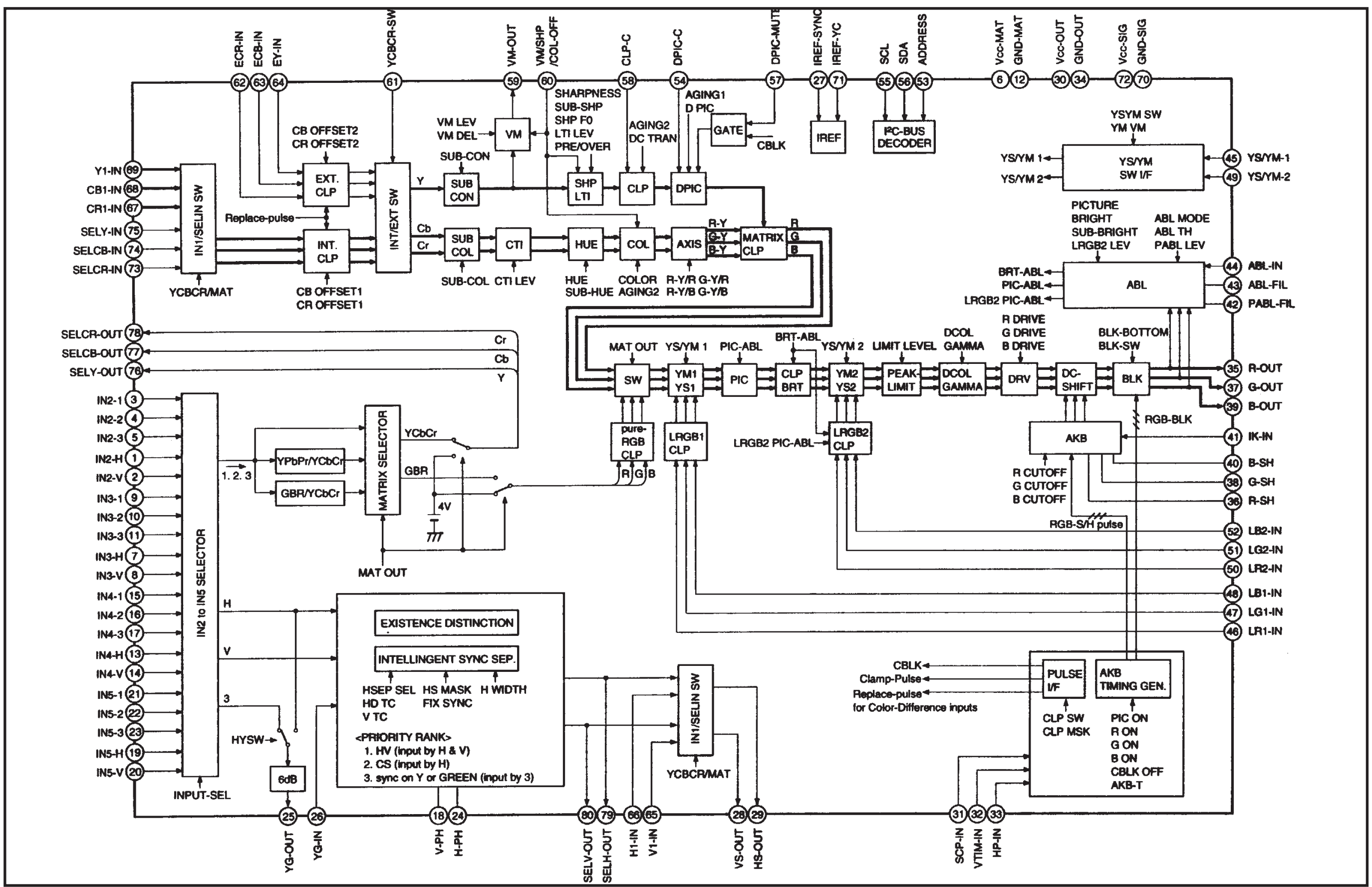
● BA6287F <Motor Drive IC5501, IC5551>



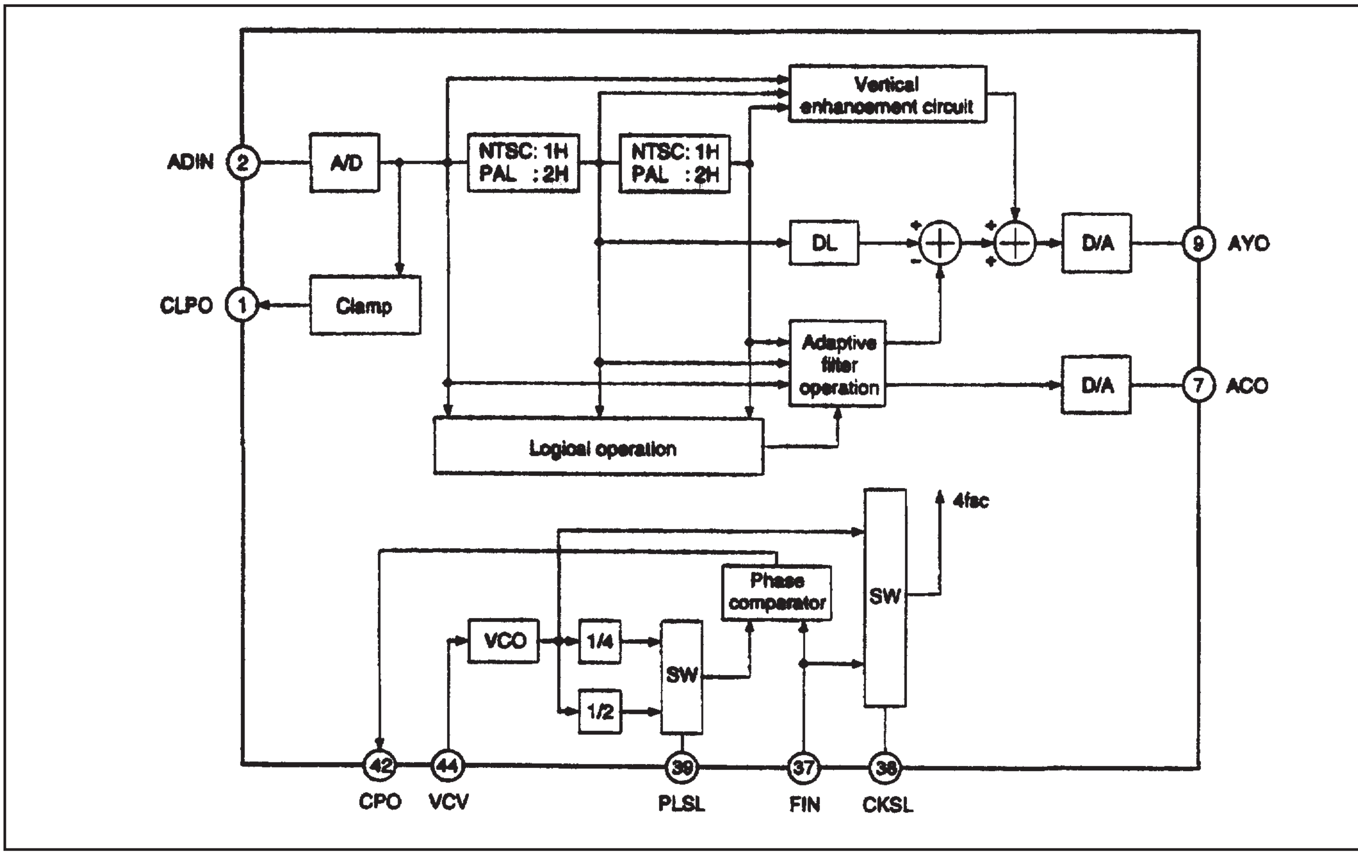
● BA7078AF <Selector, IC6241>



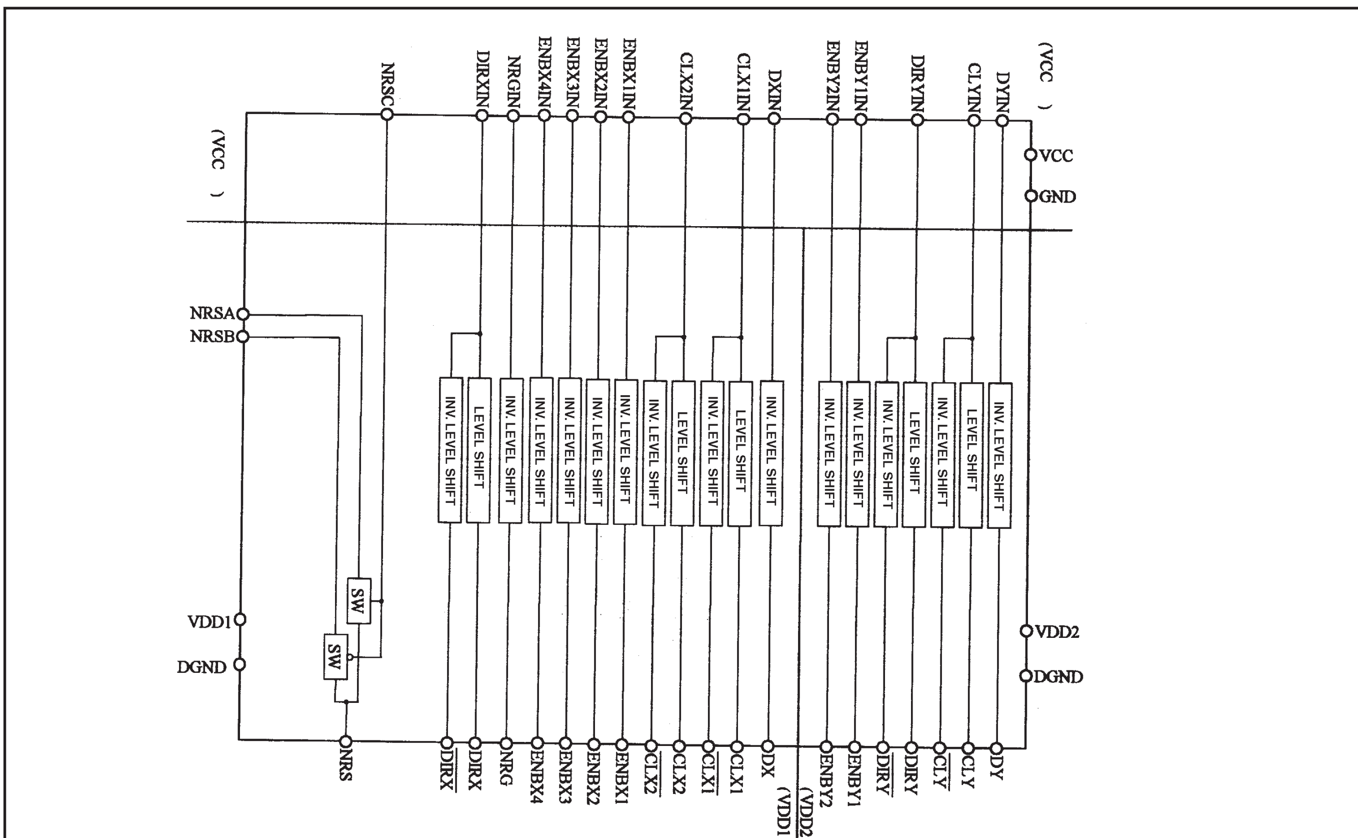
● CXA2101AQ <RGB Matrix, IC4101>



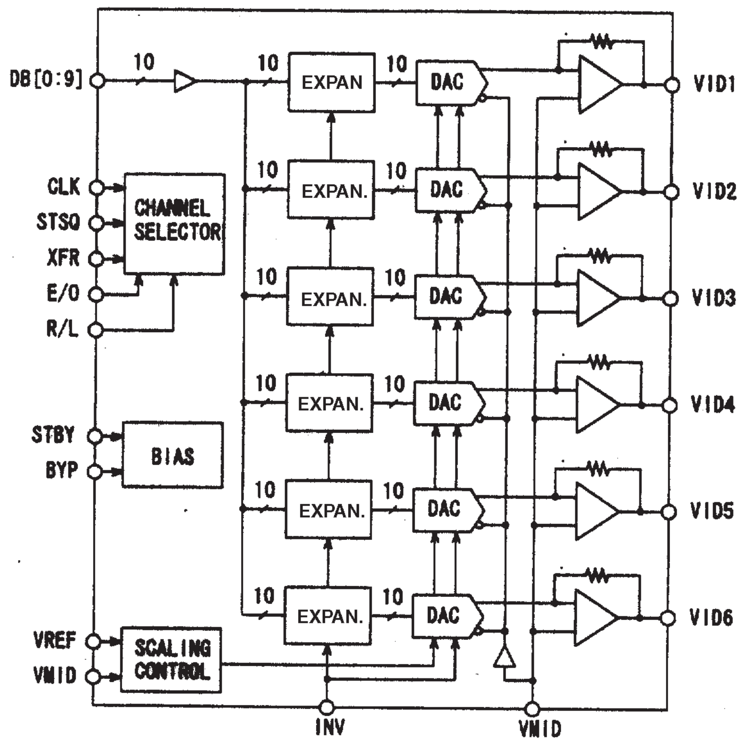
● CXD2064Q <Digital Comb Filter, IC2101>



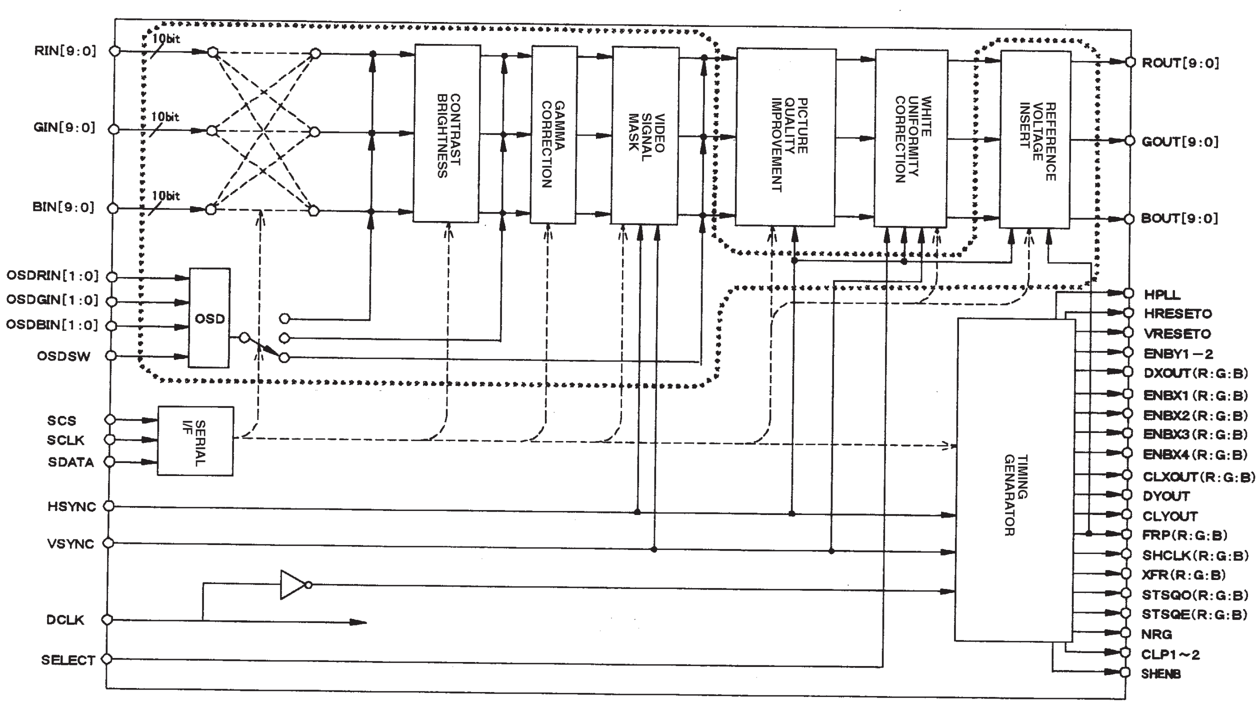
● L3E01031 <Level Shift, IC3531, IC3561>



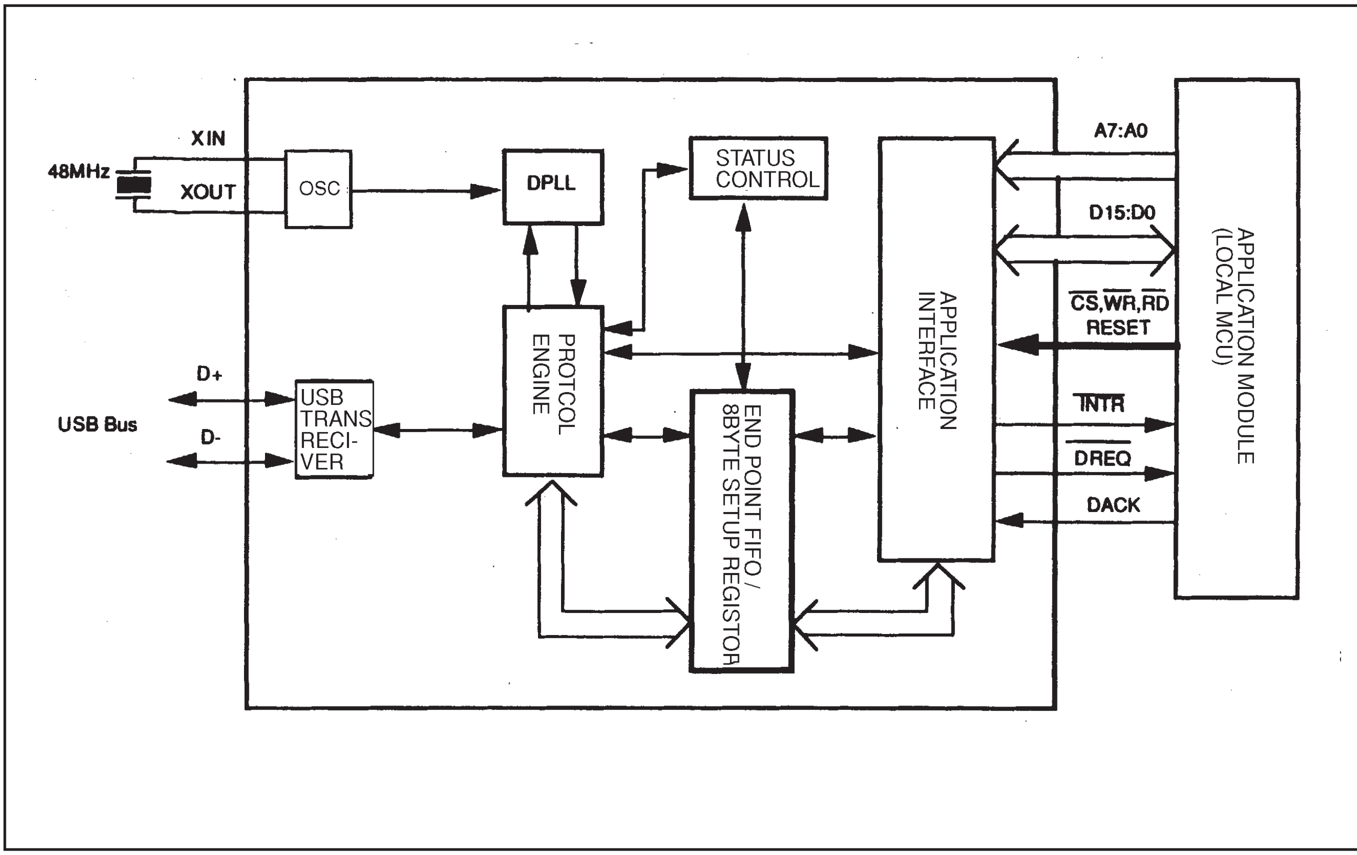
● L3E06070 <D/A-Sample & Hold, IC501, IC531, IC561>



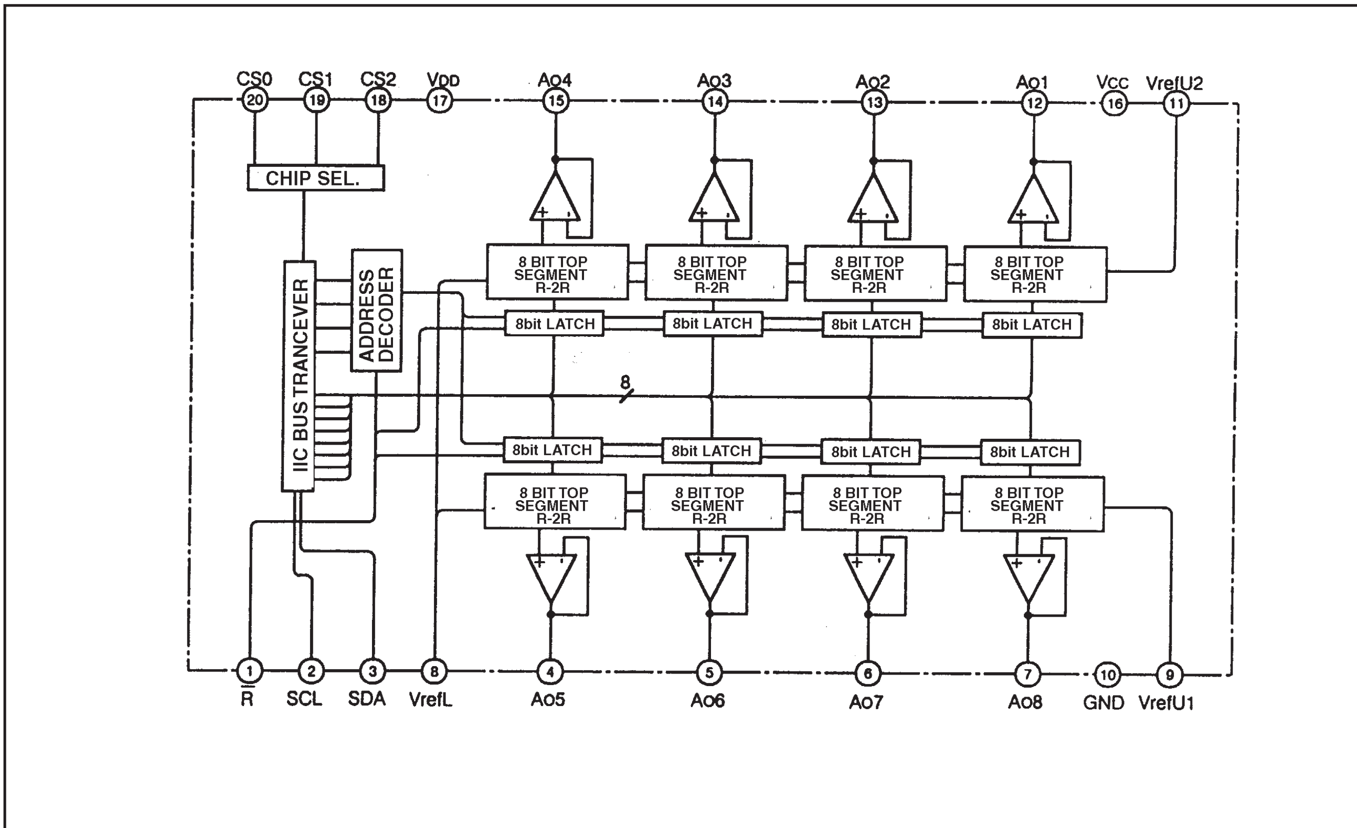
● L3E07050 <Color, Gamma Correction & Timing Controller , IC401>



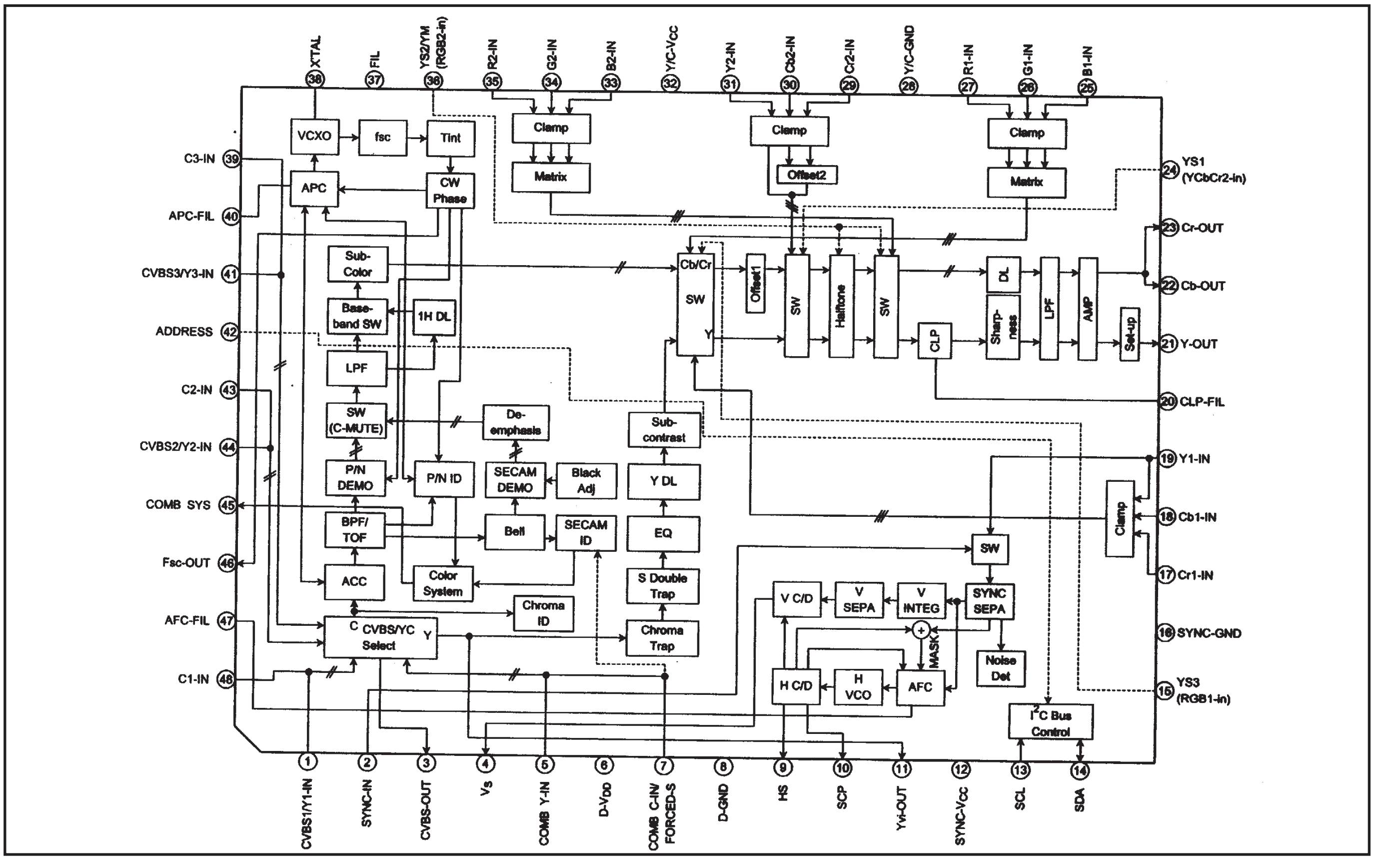
● ML60851 <USB I/F, IC9801>



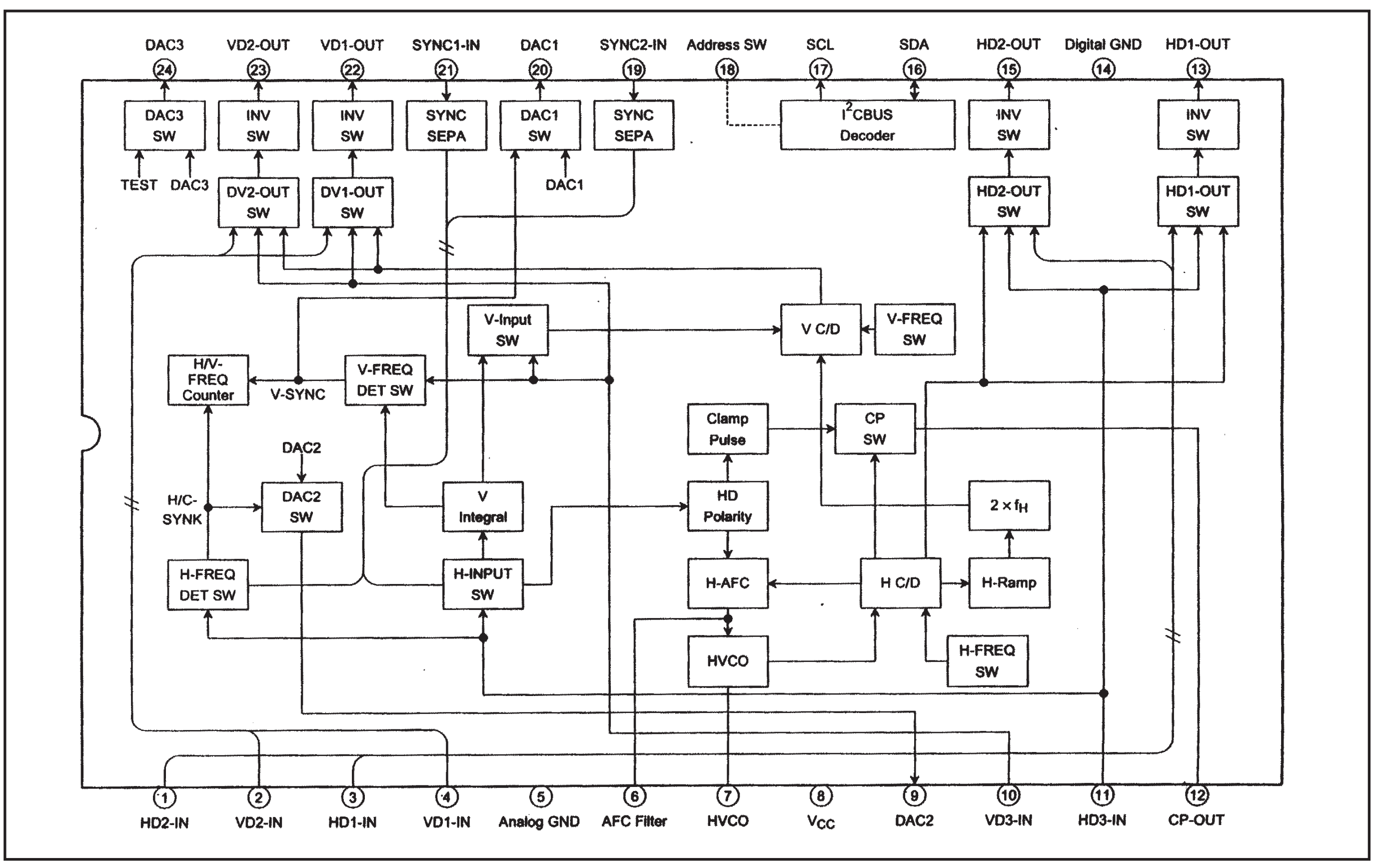
● M62393 <D/A, IC2571>



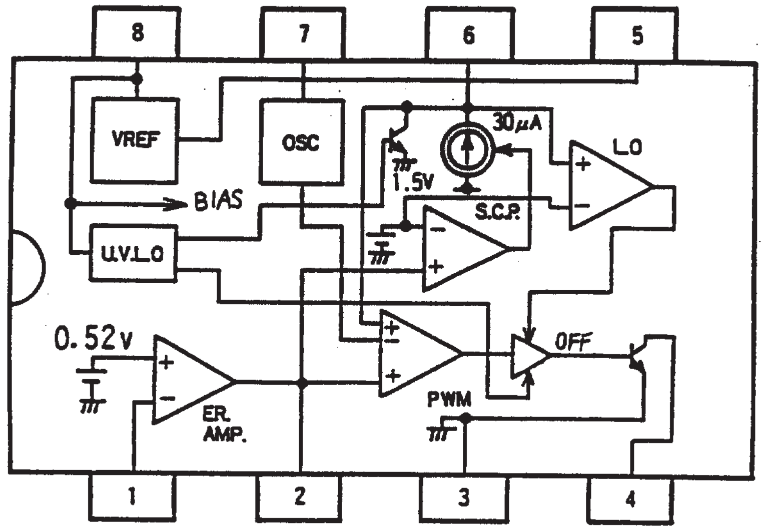
● TB1274AF <Video Decoder, IC1101>



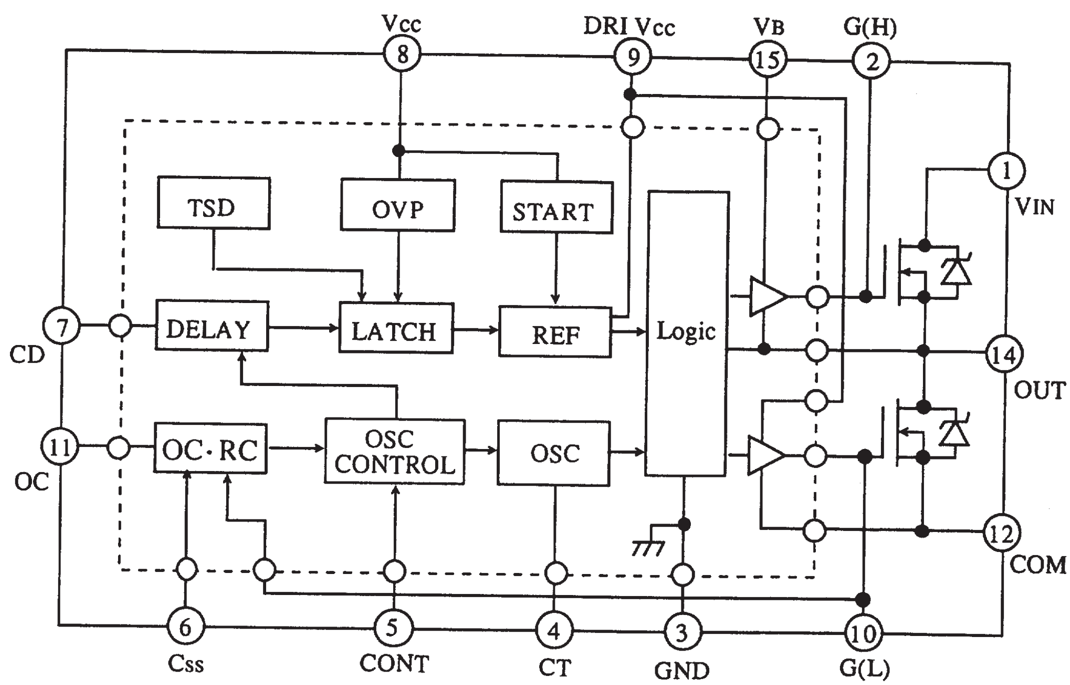
● TA1318N <AFC Detector, IC6171>



● FA7612CA <PWC Controller, IC65A, IC671, IC681>



● STR-Z2156 <Switching Controller, IC631>



Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector.
Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

CAPACITOR CERAMIC 100P K 50V

- 50V — Rated Voltage
- K — Tolerance Symbols:

Less than 10pF

A : Not specified	B : ±0.1pF	C : ±0.25pF
D : ±0.5pF	E : +0 -1pF	F : ±1PF
G : ±2pF	H : +0.1 -0pF	L : +0 -0.1pF
R : ±0.25 -0pF	S : +0-0.25pF	

More than 10pF

A : Not specified	B : ±0.1%	C : ±0.25%
D : ±0.5%	F : ±1%	G : ±2%
H : ±3%	J : ±5%	K : ±10%
L : ±15%	M : ±20%	N : ±30%
P : +100-0%	Q : +30-10%	T : +50-10%
U : +75-10%	V : +20-10%	W : +100-10%
X : +40-20%	Y : +150-10%	Z : +80-20%

- 100P — Rated value: P=pico farad, U=micro farad
- CERAMIC — Material:

CERAMIC........... Ceramic
MT-PAPER......... Metallized Paper
POLYESTER...... Polyester
MT-POLYEST.....Metallized Polyester
POLYPRO.......... Polypropylene
MT-POLYPRO.... Metallized Polypropylene
COMPO FILM..... Composite film
MT-COMPO........Metallized Composite
STYRENE...........Styrene
TA-SOLID........... Tantalum Oxide Solid Electrolytic
AL-SOLID........... Aluminium Solid Electrolytic
ELECT................ Aluminum Foil Electrolytic
NP-ELECT..........Non-polarised Electrolytic
OS-SOLID.......... Aluminium Solid with Organic Semiconductive Electrolytic
POS-SOLID........ Polymerized Organic Semiconductive
DL-ELECT.......... Double Layered Electrolytic
PPS-FILM...........Polyphenylene Sulfide Film
MT-PPS-FILM.....Metalized Polyphenylene Sulfide Film
MT-PEN-FILM.....Metalized Polyethylenenaphthalate Film
CAPACITOR.......Other

RESISTOR CARBON 4.7K J A 1/4W

- 1/4W — Rated Wattage
- A — Performance Symbols:

A: General B: Non flammable Z: Low noise
Other: Temperature coefficient

T: ±10ppm/°C	U: ±25ppm/°C	C: ±50ppm/°C
D: ±100ppm/°C	E: ±200ppm/°C	F: ±250ppm/°C
G: ±350ppm/°C	H: ±1000ppm/°C±10%	W: ±1200ppm/°C±10%
Y: ±1400ppm/°C±10%	J: ±2000ppm/°C±10%	K: ±2400ppm/°C±10%
L: ±2700ppm/°C±10%	M: ±3000ppm/°C±10%	N: ±3300ppm/°C±10%
P: ±3600ppm/°C±10%	Q: ±3900ppm/°C±10%	R: ±4200ppm/°C±10%
S: ±4300ppm/°C±10%	V: ±4500ppm/°C±10%	X: ±8000ppm/°C±10%

- J — Tolerance Symbols:

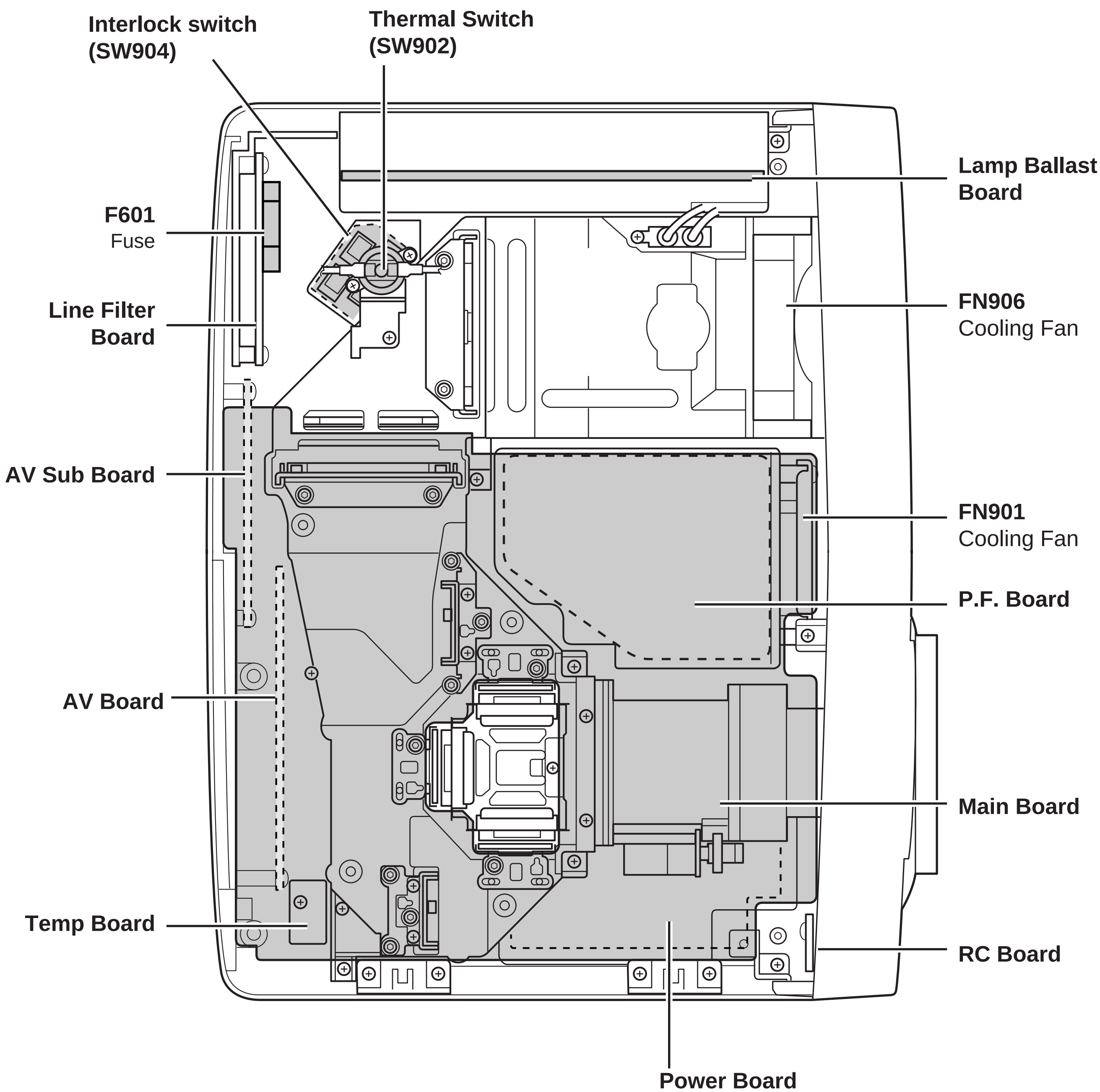
A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%
F: ±1% G: ±2% J: ±5% K: ±10%
M: ±20% P: +5-15% Z: 0 ohm

- 4.7K — Rated value, ohms:
K: 1,000, M: 1,000,000
- CARBON — Material:

CARBON........... Carbon
MT-FILM............ Metal Film
OXIDE-MT......... Oxide Metal Film
SOLID................ Composition
MT-GLAZE......... Metal Glaze
WIRE WOUND... Wire Wound
CERAMIC RES.. Ceramic
FUSIBLE RES.... Fusible
RESISTOR .... Other

Note: Parts order must contain Chassis No., Part No., and Descriptions.

● OUT OF CIRCUIT BOARD



Electrical Parts List

ASSEMBLIED BOARDS

Part No.	Description	
⚠ 610 292 5609	ASSY,PWB,KEY SW MS6A	1AA0B10C34000
⚠ 610 299 4155	ASSY,PWB,POWER MD8A	1AA0B10C352BA
⚠ 610 299 4162	ASSY,PWB,P.F. MD8A	1AA0B10C352BB
⚠ 610 294 1708	ASSY,PWB,LINE FILTER MS6A	1AA0B10C3520C
⚠ 610 294 1715	ASSY,PWB,R/C MS6A	1AA0B10C3520D
⚠ 610 297 1842	ASSY,PWB,MAIN ME8E	1AA0B10C371BA
⚠ 610 297 1873	ASSY,PWB,TEMP ME8A	1AA0B10C3710B
⚠ 610 297 1798	ASSY,PWB,AV MD8A	1AA0B10C3700A
⚠ 610 297 1804	ASSY,PWB,AV SUB MD8A	1AA0B10C3700B

OUT OF CIRCUIt BOARDS

Key No.	Part No.	Description
⚠ LF901	645 038 8088	UNIT,NOISE FILTER
⚠ LP900	610 293 2751	COMPL,OPTICAL LAMP-MS6A
L901	645 044 6207	CORE,FERRITE
L902	645 044 6207	CORE,FERRITE

MISCELLANEOUS

Key No.	Part No.	Description
⚠ A901	645 047 1346	UNIT,BALLAST
⚠ FN901	645 047 6211	MOTOR,FAN DC 1.5W
⚠ FN902	645 052 8774	MOTOR,FAN DC 1.8W
⚠ FN903	645 052 9160	MOTOR,FAN DC 1.8W
⚠ FN904	645 052 9160	MOTOR,FAN DC 1.8W
⚠ FN905	645 052 9177	MOTOR,FAN DC 1.8W
⚠ FN906	645 052 0754	MOTOR,FAN DC 3.0W
SP901	645 030 6150	SPEAKER,8
⚠ SW902	645 026 5457	SWITCH,THERMAL
	645 048 3158	SWITCH,THERMAL
⚠ SW904	645 024 8986	SWITCH,PUSH 2P-2TX2

KEY BOARD

610 292 5609 ASSY,PWB,KEY SW MS6A 1AA0B10C34000

CAPACITOR

Key No.	Part No.	Description		
C6801	403 164 0204	CERAMIC	0.1U Z	25V
C6802	403 164 0204	CERAMIC	0.1U Z	25V
C6803	403 164 0204	CERAMIC	0.1U Z	25V

RESISTOR

Key No.	Part No.	Description		
R6801	401 105 4106	MT-GLAZE	3.3K JA	1/16W
R6802	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6804	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6806	401 105 1600	MT-GLAZE	15K JA	1/16W
R6807	401 105 6605	MT-GLAZE	6.8K JA	1/16W
R6808	401 105 4601	MT-GLAZE	3.9K JA	1/16W
R6809	401 105 4106	MT-GLAZE	3.3K JA	1/16W
R6811	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6812	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6816	401 105 1600	MT-GLAZE	15K JA	1/16W
R6817	401 105 6605	MT-GLAZE	6.8K JA	1/16W
R6818	401 105 4601	MT-GLAZE	3.9K JA	1/16W
R6819	401 105 4106	MT-GLAZE	3.3K JA	1/16W
R6821	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6822	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6831	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6832	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6833	401 105 7909	MT-GLAZE	0.000 ZA	1/16W
R6834	401 105 7909	MT-GLAZE	0.000 ZA	1/16W

DIODE

Key No.	Part No.	Description
D6801	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D6802	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D6803	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D6804	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D6831	407 209 7401	LED SML-210YT-K-T86
	407 209 7500	LED SML-210YT T86 L
D6832	407 203 7803	LED SML-210LT T86 M
D6833	407 203 7902	LED SML-210MT T86 M
D6834	407 203 7803	LED SML-210LT T86 M

MISCELLANEOUS

Key No.	Part No.	Description
SW6801	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6802	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6803	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6804	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6805	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6806	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6807	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6808	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6809	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6810	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6812	645 026 2791	SWITCH,PUSH 1P-1TX1

POWER BOARD

610 299 4155 ASSY,PWB,POWER MD8A 1AA0B10C352BA

TRANSISTOR

Key No.	Part No.	Description
Q5501	405 014 4509	TR 2SC2412K T146 R
Q5551	405 014 4509	TR 2SC2412K T146 R
Q65A	405 047 9007	TR 2SB1204-S-TL
	405 047 9106	TR 2SB1204-T-TL
Q65B	405 014 4509	TR 2SC2412K T146 R
Q65C	405 014 4509	TR 2SC2412K T146 R
Q651	405 014 4509	TR 2SC2412K T146 R
Q66A	405 014 4509	TR 2SC2412K T146 R
Q661	405 138 1309	TR 2SB1565-E
	405 138 1408	TR 2SB1565-F
Q662	405 014 4509	TR 2SC2412K T146 R
Q67A	405 139 7706	TR IMZ1A-T108
Q671	405 047 9007	TR 2SB1204-S-TL
	405 047 9106	TR 2SB1204-T-TL
Q672	405 014 4509	TR 2SC2412K T146 R
Q68A	405 139 7706	TR IMZ1A-T108
Q681	405 047 9007	TR 2SB1204-S-TL
	405 047 9106	TR 2SB1204-T-TL
Q682	405 014 4509	TR 2SC2412K T146 R
Q69A	405 014 4509	TR 2SC2412K T146 R
Q691	405 154 3301	TR 2SK3280-TL

INTEGRATED CIRCUIT

Key No.	Part No.	Description
IC5501	409 362 1104	IC BA6287F
IC5551	409 362 1104	IC BA6287F
IC631	409 421 4701	IC STR-Z2156
IC65A	409 459 5404	IC FA7612CN
IC651	409 344 6509	IC UPC1093T-E1
IC671	409 459 5404	IC FA7612CN
IC681	409 459 5404	IC FA7612CN

CAPACITOR

Key No.	Part No.	Description		
C5503	403 149 9208	CERAMIC	0.01U Z	50V
C5553	403 149 9208	CERAMIC	0.01U Z	50V
C630	403 323 8706	MT-POLYEST	0.047U K	450V

Key No.	Part No.	Description
C631	403 192 4809	TA-SOLID 2.2U M 35V
C633	403 113 3805	CERAMIC 1000P K 50V
C634	403 247 3306	CERAMIC 330P K 2K
C635	403 167 8603	CERAMIC 220P K 2K
C636	403 070 2606	CERAMIC 0.1U Z 50V
C637	403 157 6800	CERAMIC 680P K 50V
C638	403 208 1402	TA-SOLID 1U M 25V
C639	403 356 1804	ELECT 220U M 35V
C640	403 164 0204	CERAMIC 0.1U Z 25V
C641	403 281 5205	CERAMIC 0.22U Z 16V
C642	403 083 4307	POLYPRO 0.022U J 400V
C643	403 256 2406	CERAMIC 0.22U Z 50V
C65A	403 157 6404	CERAMIC 330P K 50V
C65B	403 113 3805	CERAMIC 1000P K 50V
C65D	403 155 2309	CERAMIC 4700P K 50V
C65E	403 304 2105	ELECT 47U M 6.3V
C65F	403 194 4609	ELECT 470U M 16V
C65G	403 164 0204	CERAMIC 0.1U Z 25V
C651	403 369 2409	ELECT 2700U M 25V
C652	403 350 5303	ELECT 3900U M 10V
C653	403 331 0303	ELECT 470U M 16V
C654	403 164 0204	CERAMIC 0.1U Z 25V
C655	403 164 0204	CERAMIC 0.1U Z 25V
C656	403 345 9606	CERAMIC 0.47U K 10V
C657	403 157 6404	CERAMIC 330P K 50V
C658	403 157 6404	CERAMIC 330P K 50V
C661	403 218 8101	ELECT 1000U M 25V
C671	403 304 2105	ELECT 47U M 6.3V
C672	403 113 3805	CERAMIC 1000P K 50V
C673	403 157 6404	CERAMIC 330P K 50V
C674	403 155 2309	CERAMIC 4700P K 50V
C676	403 194 4609	ELECT 470U M 16V
C681	403 304 2105	ELECT 47U M 6.3V
C682	403 113 3805	CERAMIC 1000P K 50V
C683	403 157 6404	CERAMIC 330P K 50V
C684	403 155 2309	CERAMIC 4700P K 50V
C686	403 194 4609	ELECT 470U M 16V
C69Z	403 164 0204	CERAMIC 0.1U Z 25V
C691	403 206 9004	ELECT 1000U M 6.3V
C692	403 206 9004	ELECT 1000U M 6.3V
C693	403 206 9004	ELECT 1000U M 6.3V
C694	403 206 9004	ELECT 1000U M 6.3V
RESISTOR		
R5501	401 105 0504	MT-GLAZE 1K JA 1/16W
R5502	401 105 0504	MT-GLAZE 1K JA 1/16W
R5503	401 105 5202	MT-GLAZE 470 JA 1/16W
R5504	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5505	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5506	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5551	401 105 0504	MT-GLAZE 1K JA 1/16W
R5552	401 105 0504	MT-GLAZE 1K JA 1/16W
R5553	401 105 5202	MT-GLAZE 470 JA 1/16W
R5554	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5555	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5556	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R63B	401 275 2902	MT-GLAZE 68K JA 1W
R63C	401 275 2902	MT-GLAZE 68K JA 1W
R63D	401 275 2902	MT-GLAZE 68K JA 1W
R63E	401 275 2902	MT-GLAZE 68K JA 1W
⚠ R633	402 079 7803	FUSIBLE RES 22 JH 1/4W
R634	401 238 4509	MT-GLAZE 47 JA 1/3W
R635	401 105 0504	MT-GLAZE 1K JA 1/16W
R636	401 257 7406	MT-GLAZE 120 JA 1/3W
R637	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R638	401 105 0603	MT-GLAZE 10K JA 1/16W
R643	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Key No.	Part No.	Description
R645	401 105 0603	MT-GLAZE 10K JA 1/16W
R65A	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R65B	401 238 4509	MT-GLAZE 47 JA 1/3W
R65C	401 162 6303	MT-GLAZE 330 JA 1W
R65E	401 105 8203	MT-GLAZE 68K JA 1/16W
R65G	401 105 4205	MT-GLAZE 33K JA 1/16W
R65H	401 105 0603	MT-GLAZE 10K JA 1/16W
R65I	401 105 8203	MT-GLAZE 68K JA 1/16W
R65J	401 113 6307	MT-GLAZE 4.3K JA 1/16W
R65K	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R65U	401 105 0603	MT-GLAZE 10K JA 1/16W
R65V	401 105 0603	MT-GLAZE 10K JA 1/16W
R65W	401 105 0603	MT-GLAZE 10K JA 1/16W
R65X	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R65Y	401 105 2201	MT-GLAZE 180K JA 1/16W
R65Z	401 105 4304	MT-GLAZE 330K JA 1/16W
R651	401 105 0504	MT-GLAZE 1K JA 1/16W
R652	401 105 0306	MT-GLAZE 10 JA 1/16W
R653	401 186 0202	MT-GLAZE 10K DA 1/16W
R654	401 185 9305	MT-GLAZE 560 DA 1/16W
R655	401 185 9503	MT-GLAZE 6.8K DA 1/16W
R656	401 105 3208	MT-GLAZE 270 JA 1/16W
R657	401 105 0504	MT-GLAZE 1K JA 1/16W
R658	401 105 0504	MT-GLAZE 1K JA 1/16W
R659	401 105 0504	MT-GLAZE 1K JA 1/16W
R66A	401 105 0603	MT-GLAZE 10K JA 1/16W
R66B	401 105 0603	MT-GLAZE 10K JA 1/16W
R660	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R661	401 035 5204	MT-GLAZE 10K JA 1/8W
R662	401 230 8000	MT-GLAZE 1K JA 1/3W
R663	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R664	401 105 0603	MT-GLAZE 10K JA 1/16W
R67A	401 217 3806	MT-GLAZE 27K FA 1/16W
R67B	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R67C	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R67D	401 230 2503	MT-GLAZE 1K FA 1/16W
R67E	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R67F	401 105 0603	MT-GLAZE 10K JA 1/16W
R67G	401 105 0504	MT-GLAZE 1K JA 1/16W
R67H	401 105 2904	MT-GLAZE 22K JA 1/16W
R67I	401 105 0504	MT-GLAZE 1K JA 1/16W
R67K	401 105 0603	MT-GLAZE 10K JA 1/16W
R671	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R672	401 238 4509	MT-GLAZE 47 JA 1/3W
R673	401 162 6303	MT-GLAZE 330 JA 1W
R674	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R675	401 105 8203	MT-GLAZE 68K JA 1/16W
R676	401 105 4205	MT-GLAZE 33K JA 1/16W
R677	401 105 4304	MT-GLAZE 330K JA 1/16W
R678	401 105 2201	MT-GLAZE 180K JA 1/16W
R679	401 105 0603	MT-GLAZE 10K JA 1/16W
R68A	401 217 3806	MT-GLAZE 27K FA 1/16W
R68B	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R68C	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R68D	401 230 2503	MT-GLAZE 1K FA 1/16W
R68E	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R68F	401 105 0603	MT-GLAZE 10K JA 1/16W
R68G	401 105 0504	MT-GLAZE 1K JA 1/16W
R68H	401 105 2904	MT-GLAZE 22K JA 1/16W
R68I	401 105 0504	MT-GLAZE 1K JA 1/16W
R68K	401 105 0603	MT-GLAZE 10K JA 1/16W
R681	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R682	401 238 4509	MT-GLAZE 47 JA 1/3W
R683	401 162 6303	MT-GLAZE 330 JA 1W
R684	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R685	401 105 8203	MT-GLAZE 68K JA 1/16W
R686	401 105 4205	MT-GLAZE 33K JA 1/16W

Key No.	Part No.	Description
R687	401 105 4304	MT-GLAZE 330K JA 1/16W
R688	401 105 2201	MT-GLAZE 180K JA 1/16W
R689	401 105 0603	MT-GLAZE 10K JA 1/16W
R69A	401 105 0603	MT-GLAZE 10K JA 1/16W
R69B	401 105 0603	MT-GLAZE 10K JA 1/16W
R69C	401 105 0603	MT-GLAZE 10K JA 1/16W
R69D	401 105 0603	MT-GLAZE 10K JA 1/16W
R69E	401 105 0603	MT-GLAZE 10K JA 1/16W
R69F	401 105 0603	MT-GLAZE 10K JA 1/16W
R69G	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R69H	401 105 0504	MT-GLAZE 1K JA 1/16W
R69R	401 258 7504	MT-GLAZE 12 JA 1/3W
R69Z	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R691	401 105 2904	MT-GLAZE 22K JA 1/16W
R692	401 105 0702	MT-GLAZE 100K JA 1/16W
TRANSFORMER		
⚠ T651	645 030 7126	TRANS,POWER,PULSE
COIL		
L65A	645 048 5381	INDUCTOR,100U K
L661	645 048 5688	INDUCTOR,47U K
L671	645 048 5381	INDUCTOR,100U K
L681	645 048 5381	INDUCTOR,100U K
L691	645 048 5664	INDUCTOR,390U K
L692	645 007 8118	INDUCTOR,390U K
L693	645 007 7975	INDUCTOR,100U K
L694	645 001 4529	INDUCTOR,100U K
DIODE		
D5501	407 209 4509	ZD UDZS-TE-176.8B
	407 187 7806	ZENER DIODE UDZ6.8B-TE-17
D5551	407 209 4509	ZD UDZS-TE-176.8B
	407 187 7806	ZENER DIODE UDZ6.8B-TE-17
D631	407 190 4106	DIODE SFPL-52V
D633	407 187 8209	ZENER DIODE UDZ12B-TE-17
D636	407 226 7101	DIODE SC311-06
D65A	407 201 2701	DIODE RB051L-40-TE25
D65B	407 149 0807	DIODE 1SS355-TE-17
D651	407 222 9604	DIODE FMB-2306
D652	407 222 9703	DIODE FMJ-23L
D653	407 190 4106	DIODE SFPL-52V
D654	407 209 1201	ZD UDZS-TE-176.2B
D661	407 149 0807	DIODE 1SS355-TE-17
D671	407 201 2701	DIODE RB051L-40-TE25
D672	407 149 0807	DIODE 1SS355-TE-17
D681	407 201 2701	DIODE RB051L-40-TE25
D682	407 149 0807	DIODE 1SS355-TE-17
D69A	407 004 0706	DIODE DCB015-TB
D69B	407 004 0706	DIODE DCB015-TB
D69C	407 004 0706	DIODE DCB015-TB
MISCELLANEOUS		
⚠ PC641	408 039 3502	PC TLP721F(D4-GB)
⚠ PC642	408 039 3502	PC TLP721F(D4-GB)
⚠ PC643	408 039 3502	PC TLP721F(D4-GB)

P.F. BOARD

610 299 4162 ASSY,PWB,P.F. MD8A 1AA0B10C352BB

Key No.	Part No.	Description
TRANSISTOR		
Q611	405 140 3704	TR 2SK2698
Q621	405 014 4509	TR 2SC2412K T146 R
Q622	405 134 5905	TR 2SA1037AK-T146-R
INTEGRATED CIRCUIT		
IC611	409 483 3803	IC FA5332M
CAPACITOR		
C611	403 222 1303	CERAMIC 1000P K 1K
C612	403 222 1303	CERAMIC 1000P K 1K
C615	403 275 6003	MT-POLYEST 1.5U J 400V
C617	404 085 9802	ELECT 180U M 450V
C618	403 323 8706	MT-POLYEST 0.047U K 450V
C62A	403 157 3304	CERAMIC 68P J 50V
C62B	403 157 6602	CERAMIC 470P K 50V
C62C	403 281 5007	CERAMIC 0.033U K 25V
C62D	403 164 0204	CERAMIC 0.1U Z 25V
C62E	403 164 0204	CERAMIC 0.1U Z 25V
C62F	403 370 9107	CERAMIC 0.068U K 50V
C62G	403 164 0204	CERAMIC 0.1U Z 25V
C62I	403 149 9208	CERAMIC 0.01U Z 50V
C62J	403 265 3302	CERAMIC 680P J 50V
C62K	403 343 4603	CERAMIC 0.022U K 50V
RESISTOR		
R61A	401 237 0007	MT-GLAZE 47K JA 1W
R61B	401 237 0007	MT-GLAZE 47K JA 1W
R61C	401 237 0007	MT-GLAZE 47K JA 1W
R61D	401 237 0007	MT-GLAZE 47K JA 1W
R61E	401 237 0007	MT-GLAZE 47K JA 1W
R61F	401 237 0007	MT-GLAZE 47K JA 1W
R613	402 088 0307	RESISTER 0.15 KA 2W
R614	402 088 0307	RESISTER 0.15 KA 2W
R615	401 242 3901	MT-GLAZE 240K JA 1/2W
R616	401 242 3901	MT-GLAZE 240K JA 1/2W
R617	401 259 9002	MT-GLAZE 150K FA 1/2W
R618	401 259 9002	MT-GLAZE 150K FA 1/2W
R619	401 259 9002	MT-GLAZE 150K FA 1/2W
R62A	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R62B	401 105 0603	MT-GLAZE 10K JA 1/16W
R62C	401 105 5509	MT-GLAZE 470K JA 1/16W
R62D	401 105 2201	MT-GLAZE 180K JA 1/16W
R62E	401 113 5805	MT-GLAZE 1.1K JA 1/16W
R62F	401 218 4406	MT-GLAZE 1.2K FA 1/16W
R62G	401 105 0405	MT-GLAZE 100 JA 1/16W
R62H	401 105 4007	MT-GLAZE 330 JA 1/16W
R62I	401 158 4108	MT-GLAZE 4.7 JA 1/16W
R62J	401 105 2607	MT-GLAZE 22 JA 1/16W
R62L	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R62P	401 105 2508	MT-GLAZE 20K JA 1/16W
R62Q	401 105 2607	MT-GLAZE 22 JA 1/16W
R62R	401 114 0908	MT-GLAZE 3.3M JA 1/16W
R620	401 259 9002	MT-GLAZE 150K FA 1/2W
R623	401 105 5301	MT-GLAZE 4.7K JA 1/16W
VARIABLE RESISTOR		
VR611	645 002 3460	VR,SEMI,1K S
TRANSFORMER		
TSW611	645 027 4145	SWITCH,THERMAL
	645 031 0256	THERMOSTATS
COIL		
L611	645 048 4742	INDUCTOR,850U
DIODE		
DB611	407 202 7705	DIODE D10XB60
D613	407 149 6304	DIODE SFPB-54V
D614	407 191 3900	DIODE FML-G16S
D616	407 149 0807	DIODE 1SS355-TE-17
D617	407 149 0807	DIODE 1SS355-TE-17
D618	407 149 0807	DIODE 1SS355-TE-17
D619	407 149 0807	DIODE 1SS355-TE-17

Key No.	Part No.	Description
MISCELLANEOUS		
FB611	610 229 3531	CORE
FB612	610 229 3531	CORE
FB613	610 229 3531	CORE
PTH611	408 037 4600	THERMISTOR NTH11D8R0LA

LINE FILTER BOARD

610 294 1708 ASSY,PWB,LINE FILTER MS6A 1AA0B10C3520C

Key No.	Part No.	Description
CAPACITOR		
⚠ C601	404 081 4702	MT-POLYEST 0.22U M 275V
⚠ C602	404 081 4702	MT-POLYEST 0.22U M 275V
⚠ C603	404 081 4702	MT-POLYEST 0.22U M 275V
⚠ C604	404 081 4702	MT-POLYEST 0.22U M 275V
RESISTOR		
⚠ R601	401 008 8607	CARBON 220K JA 1/2W
VARIABLE RESISTOR		
⚠ VA601	408 018 9808	VARISTOR ENC471D-14AS
COIL		
⚠ L601	645 025 7810	LINE FILTER
⚠ L602	645 025 7810	LINE FILTER
MISCELLANEOUS		
⚠ F601	423 022 2102	FUSE 250V 4A

R/C BOARD

610 294 1715 ASSY,PWB,R/C MS6A 1AA0B10C3520D

Key No.	Part No.	Description
CAPACITOR		
C2801	403 304 2402	ELECT 100U M 10V
C2802	403 283 6309	CERAMIC 1U Z 10V
C2803	403 157 6602	CERAMIC 470P K 50V
RESISTOR		
RC2801	645 034 5029	UNIT,REMOCON RECEIVER
R2801	401 105 2706	MT-GLAZE 220 JA 1/16W
R2802	401 105 2706	MT-GLAZE 220 JA 1/16W
R2803	401 105 0405	MT-GLAZE 100 JA 1/16W

AV BOARD

610 297 1798 ASSY,PWB,AV MD8A 1AA0B10C3700A

Key No.	Part No.	Description
TRANSISTOR		
Q2051	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5031	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5032	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5041	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5042	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5071	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5072	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5111	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5121	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5131	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5141	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q5151	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
INTEGRATED CIRCUIT		
IC3011	409 461 7403	IC LT1399CS
IC3041	409 464 1408	IC TC74ACT14FT

Key No.	Part No.	Description
IC5011	409 051 2900	IC TC4053BF(EL)
IC5161	409 404 7200	IC TC7SET00FU-(TE85L)
CAPACITOR		
C1041	403 157 3601	CERAMIC 100P J 50V
C1042	403 157 3601	CERAMIC 100P J 50V
C1061	403 164 0204	CERAMIC 0.1U Z 25V
C2023	403 164 0204	CERAMIC 0.1U Z 25V
C2051	403 283 6309	CERAMIC 1U Z 10V
C2811	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C2812	403 283 6309	CERAMIC 1U Z 10V
C2813	403 157 6602	CERAMIC 470P K 50V
C3011	403 157 1508	CERAMIC 3P C 50V
C3012	403 157 1508	CERAMIC 3P C 50V
C3013	403 157 1508	CERAMIC 3P C 50V
C3016	403 164 0204	CERAMIC 0.1U Z 25V
C3017	403 304 2105	ELECT 47U M 6.3V
C3018	403 164 0204	CERAMIC 0.1U Z 25V
C3041	403 164 0204	CERAMIC 0.1U Z 25V
C5001	403 229 3508	ELECT 100U M 16V
	403 335 0408	ELECT 100U M 16V
C5002	403 164 0204	CERAMIC 0.1U Z 25V
C5011	403 205 7803	TA-SOLID 2.2U M 16V
C5012	403 205 7803	TA-SOLID 2.2U M 16V
C5013	403 205 7803	TA-SOLID 2.2U M 16V
C5014	403 205 7803	TA-SOLID 2.2U M 16V
C5021	403 304 3300	ELECT 47U M 16V
C5022	403 164 0204	CERAMIC 0.1U Z 25V
C5031	403 164 0204	CERAMIC 0.1U Z 25V
C5101	403 229 3508	ELECT 100U M 16V
	403 335 0408	ELECT 100U M 16V
C5102	403 164 0204	CERAMIC 0.1U Z 25V
C5108	403 164 0204	CERAMIC 0.1U Z 25V
C5111	403 304 2105	ELECT 47U M 6.3V
C5121	403 162 4709	ELECT 10U M 16V
	403 335 0309	ELECT 10U M 16V
C5131	403 348 5803	CERAMIC 0.47U K 10V
C5141	403 162 4709	ELECT 10U M 16V
	403 335 0309	ELECT 10U M 16V
C5151	403 162 4709	ELECT 10U M 16V
	403 335 0309	ELECT 10U M 16V
C5161	403 164 0204	CERAMIC 0.1U Z 25V
RESISTOR		
RC2811	645 034 5029	UNIT,REMOCON RECEIVER
R1001	401 113 4402	MT-GLAZE 75 JA 1/16W
R1002	401 113 4402	MT-GLAZE 75 JA 1/16W
R1003	401 113 4402	MT-GLAZE 75 JA 1/16W
R1004	401 113 4402	MT-GLAZE 75 JA 1/16W
R1005	401 113 4402	MT-GLAZE 75 JA 1/16W
R1006	401 113 4402	MT-GLAZE 75 JA 1/16W
R1007	401 113 4402	MT-GLAZE 75 JA 1/16W
R1008	401 113 4402	MT-GLAZE 75 JA 1/16W
R1009	401 113 4402	MT-GLAZE 75 JA 1/16W
R1010	401 113 4402	MT-GLAZE 75 JA 1/16W
R1011	401 113 4402	MT-GLAZE 75 JA 1/16W
R1012	401 113 4402	MT-GLAZE 75 JA 1/16W
R1013	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1014	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1015	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1016	401 105 0405	MT-GLAZE 100 JA 1/16W
R1017	401 105 0405	MT-GLAZE 100 JA 1/16W
R1018	401 105 0405	MT-GLAZE 100 JA 1/16W
R1021	401 105 0405	MT-GLAZE 100 JA 1/16W
R1023	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1024	401 105 0405	MT-GLAZE 100 JA 1/16W
R1025	401 105 0603	MT-GLAZE 10K JA 1/16W

Key No.	Part No.	Description
R1026	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1031	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1032	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1036	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1041	401 105 5509	MT-GLAZE 470K JA 1/16W
R1042	401 105 5509	MT-GLAZE 470K JA 1/16W
R1043	401 105 0405	MT-GLAZE 100 JA 1/16W
R1044	401 105 0405	MT-GLAZE 100 JA 1/16W
R1061	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1065	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1066	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2001	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2002	401 113 4402	MT-GLAZE 75 JA 1/16W
R2003	401 113 4402	MT-GLAZE 75 JA 1/16W
R2004	401 113 4402	MT-GLAZE 75 JA 1/16W
R2005	401 113 4402	MT-GLAZE 75 JA 1/16W
R2006	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2007	401 113 4402	MT-GLAZE 75 JA 1/16W
R2008	401 113 4402	MT-GLAZE 75 JA 1/16W
R2009	401 113 4402	MT-GLAZE 75 JA 1/16W
R2010	401 113 4402	MT-GLAZE 75 JA 1/16W
R2011	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2012	401 113 4402	MT-GLAZE 75 JA 1/16W
R2013	401 113 4402	MT-GLAZE 75 JA 1/16W
R2014	401 113 4402	MT-GLAZE 75 JA 1/16W
R2015	401 113 4402	MT-GLAZE 75 JA 1/16W
R2021	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2022	401 113 4402	MT-GLAZE 75 JA 1/16W
R2023	401 113 4402	MT-GLAZE 75 JA 1/16W
R2024	401 113 4402	MT-GLAZE 75 JA 1/16W
R2025	401 113 4402	MT-GLAZE 75 JA 1/16W
R2026	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2027	401 113 4402	MT-GLAZE 75 JA 1/16W
R2028	401 113 4402	MT-GLAZE 75 JA 1/16W
R2029	401 113 4402	MT-GLAZE 75 JA 1/16W
R2030	401 113 4402	MT-GLAZE 75 JA 1/16W
R2031	401 105 0603	MT-GLAZE 10K JA 1/16W
R2032	401 105 0405	MT-GLAZE 100 JA 1/16W
R2041	401 105 5509	MT-GLAZE 470K JA 1/16W
R2042	401 105 5509	MT-GLAZE 470K JA 1/16W
R2043	401 105 0405	MT-GLAZE 100 JA 1/16W
R2044	401 105 0405	MT-GLAZE 100 JA 1/16W
R2051	401 105 0504	MT-GLAZE 1K JA 1/16W
R2052	401 105 0504	MT-GLAZE 1K JA 1/16W
R2053	401 105 4700	MT-GLAZE 39K JA 1/16W
R2054	401 105 0504	MT-GLAZE 1K JA 1/16W
R2057	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2811	401 105 2706	MT-GLAZE 220 JA 1/16W
R2812	401 105 0405	MT-GLAZE 100 JA 1/16W
R3001	401 113 4402	MT-GLAZE 75 JA 1/16W
R3002	401 113 4402	MT-GLAZE 75 JA 1/16W
R3003	401 113 4402	MT-GLAZE 75 JA 1/16W
R3011	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3012	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3013	401 105 3208	MT-GLAZE 270 JA 1/16W
R3014	401 105 3208	MT-GLAZE 270 JA 1/16W
R3015	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3016	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3017	401 105 3208	MT-GLAZE 270 JA 1/16W
R3018	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3019	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3041	401 105 0306	MT-GLAZE 10 JA 1/16W
R3042	401 105 6407	MT-GLAZE 68 JA 1/16W
R3043	401 105 6407	MT-GLAZE 68 JA 1/16W
R3044	401 105 0306	MT-GLAZE 10 JA 1/16W
R5011	401 105 0702	MT-GLAZE 100K JA 1/16W
R5012	401 105 0702	MT-GLAZE 100K JA 1/16W

Key No.	Part No.	Description
R5013	401 105 0702	MT-GLAZE 100K JA 1/16W
R5014	401 105 0702	MT-GLAZE 100K JA 1/16W
R5021	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R5022	401 105 0603	MT-GLAZE 10K JA 1/16W
R5031	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5032	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5033	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5034	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5036	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5041	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5042	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5043	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5044	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5046	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5071	401 105 2904	MT-GLAZE 22K JA 1/16W
R5072	401 105 0603	MT-GLAZE 10K JA 1/16W
R5073	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5074	401 105 0603	MT-GLAZE 10K JA 1/16W
R5076	401 105 0603	MT-GLAZE 10K JA 1/16W
R5077	401 105 0603	MT-GLAZE 10K JA 1/16W
R5078	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5111	401 105 5400	MT-GLAZE 47K JA 1/16W
R5112	401 105 4700	MT-GLAZE 39K JA 1/16W
R5113	401 105 1402	MT-GLAZE 150 JA 1/16W
R5114	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5116	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5117	401 105 5103	MT-GLAZE 47 JA 1/16W
R5121	401 105 5400	MT-GLAZE 47K JA 1/16W
R5122	401 105 4700	MT-GLAZE 39K JA 1/16W
R5123	401 105 1402	MT-GLAZE 150 JA 1/16W
R5124	401 105 0504	MT-GLAZE 1K JA 1/16W
R5126	401 105 5103	MT-GLAZE 47 JA 1/16W
R5131	401 105 5400	MT-GLAZE 47K JA 1/16W
R5132	401 105 4700	MT-GLAZE 39K JA 1/16W
R5133	401 105 1402	MT-GLAZE 150 JA 1/16W
R5134	401 105 0504	MT-GLAZE 1K JA 1/16W
R5136	401 105 5103	MT-GLAZE 47 JA 1/16W
R5141	401 105 5400	MT-GLAZE 47K JA 1/16W
R5142	401 105 4700	MT-GLAZE 39K JA 1/16W
R5143	401 105 1402	MT-GLAZE 150 JA 1/16W
R5144	401 105 0504	MT-GLAZE 1K JA 1/16W
R5146	401 105 5103	MT-GLAZE 47 JA 1/16W
R5151	401 105 5400	MT-GLAZE 47K JA 1/16W
R5152	401 105 4700	MT-GLAZE 39K JA 1/16W
R5153	401 105 1402	MT-GLAZE 150 JA 1/16W
R5154	401 105 0504	MT-GLAZE 1K JA 1/16W
R5156	401 105 5103	MT-GLAZE 47 JA 1/16W
R5161	401 105 0405	MT-GLAZE 100 JA 1/16W
R5162	401 105 0405	MT-GLAZE 100 JA 1/16W
R5163	401 105 0603	MT-GLAZE 10K JA 1/16W
R5164	401 105 0603	MT-GLAZE 10K JA 1/16W
COIL		
L1021	645 044 8843	FILTER,EMI 200MHZ
L1022	645 044 8843	FILTER,EMI 200MHZ
L1041	645 045 6183	FILTER,EMI 25MHZ
L1042	645 045 6183	FILTER,EMI 25MHZ
L1051	645 045 6183	FILTER,EMI 25MHZ
L1052	645 045 6183	FILTER,EMI 25MHZ
L1053	645 045 6183	FILTER,EMI 25MHZ
L1054	645 045 6183	FILTER,EMI 25MHZ
L1055	645 045 6183	FILTER,EMI 25MHZ
L1056	645 045 6183	FILTER,EMI 25MHZ
L1057	645 045 6183	FILTER,EMI 25MHZ
L2004	645 044 8836	FILTER,EMI 100MHZ
L2005	645 044 8836	FILTER,EMI 100MHZ
L2006	645 044 8836	FILTER,EMI 100MHZ
L2023	645 044 8836	FILTER,EMI 100MHZ
L2024	645 044 8836	FILTER,EMI 100MHZ
L2025	645 045 6183	FILTER,EMI 25MHZ
L2041	645 045 6183	FILTER,EMI 25MHZ
L2042	645 045 6183	FILTER,EMI 25MHZ
L2051	645 025 5335	FILTER,EMI 2200PF
L2052	645 025 5335	FILTER,EMI 2200PF
L2053	645 025 5335	FILTER,EMI 2200PF
L2054	645 025 5335	FILTER,EMI 2200PF
L2056	645 025 5335	FILTER,EMI 2200PF
L2057	645 023 2978	INDUCTOR,800 OHM
L2058	645 023 2978	INDUCTOR,800 OHM
L3001	645 044 8843	FILTER,EMI 200MHZ
L3002	645 044 8843	FILTER,EMI 200MHZ
L3003	645 044 8843	FILTER,EMI 200MHZ
L3004	645 044 8843	FILTER,EMI 200MHZ
L3006	645 044 8843	FILTER,EMI 200MHZ
L5001	645 026 0988	INDUCTOR,2.2U M
DIODE		
D1001	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D1002	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D1003	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D1021	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1022	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1031	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1032	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1041	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1042	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1043	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1044	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1051	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1052	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1053	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1054	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1055	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1056	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1057	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1058	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1059	407 187 8605	ZENER DIODE UDZ20B-TE-17
D1061	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D1065	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1066	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1067	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1068	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2001	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2002	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2003	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2004	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2005	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2006	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2021	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2022	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2023	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2024	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2025	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2041	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2042	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2043	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2044	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2051	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2052	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2053	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2054	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2056	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2057	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2058	407 187 8209	ZENER DIODE UDZ12B-TE-17

Key No.	Part No.	Description
D2059	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2811	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2812	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D3001	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D3002	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D3003	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D3004	407 187 8209	ZENER DIODE UDZ12B-TE-17
D3006	407 187 8209	ZENER DIODE UDZ12B-TE-17

MISCELLANEOUS

Key No.	Part No.	Description
K10A	645 009 8093	SOCKET,D-SUB 15P
K10B	645 000 2571	JACK,PHONE D8.0
K10C	645 000 2595	SOCKET,DIN 8P
K10D	645 028 0382	SOCKET,USB 4P
K10E	645 009 8093	SOCKET,D-SUB 15P
K20A	645 042 2799	JACK,RCA-3
K20B	645 030 6297	SOCKET,DIN 4P
K20C	645 047 8499	JACK,RCA-2
K20D	645 017 1680	JACK,PHONE D3.6
SW1061	645 042 8104	SWITCH,PUSH 1P-1TX1

AV SUB BOARD

610 297 1804 ASSY,PWB,AV SUB MD8A 1AA0B10C3700B

TRANSISTOR

Key No.	Part No.	Description
Q011	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q012	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q013	405 134 5905	TR 2SA1037AK-T146-R
Q021	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q022	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q023	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0

INTEGRATED CIRCUIT

Key No.	Part No.	Description
IC011	409 341 4102	IC BA7655AF
IC021	409 416 6505	IC BA05FP-E2
IC031	410 428 4700	IC TDA8542AT/N1
IC6171	409 523 5002	IC TA1318AF

CAPACITOR

Key No.	Part No.	Description
C011	403 164 0204	CERAMIC 0.1U Z 25V
C012	403 283 6309	CERAMIC 1U Z 10V
C021	403 164 0204	CERAMIC 0.1U Z 25V
C022	403 283 6309	CERAMIC 1U Z 10V
C026	403 304 2105	ELECT 47U M 6.3V
C027	403 164 0204	CERAMIC 0.1U Z 25V
C028	403 164 0204	CERAMIC 0.1U Z 25V
C031	403 229 3508	ELECT 100U M 16V
	403 335 0408	ELECT 100U M 16V
C032	403 349 9800	ELECT 470U M 10V
C033	403 304 2105	ELECT 47U M 6.3V
C034	403 349 9800	ELECT 470U M 10V
C036	403 164 0204	CERAMIC 0.1U Z 25V
C6170	403 229 3508	ELECT 100U M 16V
	403 335 0408	ELECT 100U M 16V
C6171	403 229 3508	ELECT 100U M 16V
	403 335 0408	ELECT 100U M 16V
C6172	403 164 0204	CERAMIC 0.1U Z 25V
C6176	403 164 0204	CERAMIC 0.1U Z 25V
C6177	403 164 0204	CERAMIC 0.1U Z 25V
C6178	403 215 2201	CERAMIC 0.01U K 50V
C6179	403 162 6604	ELECT 2.2U M 50V
C6183	403 164 0204	CERAMIC 0.1U Z 25V
C6184	403 164 0204	CERAMIC 0.1U Z 25V
C7001	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C7002	403 164 0204	CERAMIC 0.1U Z 25V

RESISTOR

Key No.	Part No.	Description
R010	401 105 0603	MT-GLAZE 10K JA 1/16W
R011	401 105 2102	MT-GLAZE 18K JA 1/16W
R012	401 105 0504	MT-GLAZE 1K JA 1/16W
R013	401 105 0405	MT-GLAZE 100 JA 1/16W
R014	401 105 0504	MT-GLAZE 1K JA 1/16W
R015	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R016	401 105 0603	MT-GLAZE 10K JA 1/16W
R017	401 105 1709	MT-GLAZE 150K JA 1/16W
R018	401 105 0504	MT-GLAZE 1K JA 1/16W
R019	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R020	401 105 0603	MT-GLAZE 10K JA 1/16W
R021	401 105 2102	MT-GLAZE 18K JA 1/16W
R022	401 105 0504	MT-GLAZE 1K JA 1/16W
R023	401 105 0405	MT-GLAZE 100 JA 1/16W
R024	401 105 0504	MT-GLAZE 1K JA 1/16W
R025	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R026	401 105 0603	MT-GLAZE 10K JA 1/16W
R027	401 105 1709	MT-GLAZE 150K JA 1/16W
R028	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R029	401 105 5400	MT-GLAZE 47K JA 1/16W
R031	401 105 0504	MT-GLAZE 1K JA 1/16W
R032	401 105 0603	MT-GLAZE 10K JA 1/16W
R6171	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R6172	401 113 5201	MT-GLAZE 360 JA 1/16W
R6173	401 105 0405	MT-GLAZE 100 JA 1/16W
R6174	401 105 0405	MT-GLAZE 100 JA 1/16W
R6175	401 105 0405	MT-GLAZE 100 JA 1/16W
R6176	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R6177	401 105 0405	MT-GLAZE 100 JA 1/16W
R6178	401 105 0405	MT-GLAZE 100 JA 1/16W
R6179	401 105 0405	MT-GLAZE 100 JA 1/16W
R6183	401 158 4108	MT-GLAZE 4.7 JA 1/16W
R6184	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6187	401 105 0603	MT-GLAZE 10K JA 1/16W
R6188	401 105 0405	MT-GLAZE 100 JA 1/16W
R6189	401 105 0405	MT-GLAZE 100 JA 1/16W

MISCELLANEOUS

Key No.	Part No.	Description
X6171	645 046 9213	OSC,CERAMIC 503.0KHZ

MAIN BOARD

610 297 1842ASSY,PWB,MAIN ME8E 1AA0B10C371BA

TRANSISTOR

Key No.	Part No.	Description
Q111	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1131	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1132	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1133	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1141	405 134 5905	TR 2SA1037AK-T146-R
Q1142	405 134 5905	TR 2SA1037AK-T146-R
Q1143	405 134 5905	TR 2SA1037AK-T146-R
Q1151	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1152	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1153	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1161	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q131	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q132	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q151	405 134 5905	TR 2SA1037AK-T146-R
Q152	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q171	405 134 5905	TR 2SA1037AK-T146-R
Q172	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q1816	405 045 8705	TR 2SK536-TB
Q1817	405 045 8705	TR 2SK536-TB
Q1818	405 045 8705	TR 2SK536-TB
Q1819	405 045 8705	TR 2SK536-TB
Q2506	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2516	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2526	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2531	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2851	405 134 5905	TR 2SA1037AK-T146-R
Q2856	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2861	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q2865	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0

Key No.	Part No.	Description
	405 163 1701	TR 2SC2812N-L7-TB0
Q3111	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q3112	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q3113	405 134 5905	TR 2SA1037AK-T146-R
Q3162	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q3163	405 134 5905	TR 2SA1037AK-T146-R
Q3171	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q3172	405 134 5905	TR 2SA1037AK-T146-R
Q3181	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q3182	405 134 5905	TR 2SA1037AK-T146-R
Q3591	405 002 8304	TR 2SA1203-Y-TE12L
Q3592	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q4171	405 134 5905	TR 2SA1037AK-T146-R
Q4172	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q6126	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q6127	405 134 5905	TR 2SA1037AK-T146-R
Q6137	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q8121	405 045 8705	TR 2SK536-TB
Q8122	405 045 8705	TR 2SK536-TB
Q8141	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q856	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
Q9801	405 134 5905	TR 2SA1037AK-T146-R
INTEGRATED CIRCUIT		
IC1101	409 504 9005	IC TB1274AF
IC1171	409 416 6505	IC BA05FP-E2
IC121	410 300 4804	IC MM1031XM
IC1301	409 339 3605	IC 24LC16BT/SN-T
IC1311	409 301 5309	IC TC7S32FU-TE85L
IC1331	410 397 0406	IC IS61LV6416-15T
IC1341	410 448 7804	IC MBM29LV800TA90B998A
IC1351	409 501 9107	IC ICS512MT
IC1361	409 501 9107	IC ICS512MT
IC1371	409 301 5309	IC TC7S32FU-TE85L
IC1581	409 506 0406	IC M62392FP
IC1801	409 339 3605	IC 24LC16BT/SN-T
IC1811	410 409 7201	IC IS61LV256-12T
IC1821	410 349 4100	IC TC7W241FU(TE12L)
IC1826	409 400 7105	IC TC7W53FU-(TE12L)
IC1831	409 506 0406	IC M62392FP
IC1851	409 404 6302	IC M62320FP
IC1861	410 337 0503	IC TC74LCX14FT
	410 337 0602	IC HD74LVC14T
IC1871	410 325 4605	IC TC74LCX244FT
IC1881	410 311 5708	IC MC74HCT244ADT
	410 315 5506	IC HD74HCT244TV
	410 356 7507	IC SN74HCT244PWR
IC201	410 388 7001	IC AD9884AKS-100
IC2101	409 442 1307	IC CXD2064Q
IC2161	409 506 0406	IC M62392FP
IC2181	409 404 6302	IC M62320FP
IC251	410 349 4100	IC TC7W241FU(TE12L)
IC2571	409 458 3401	IC M62393FP
IC2881	409 481 8602	IC LM76CHMX-5
IC301	409 501 8308	IC PW365-10U
IC3101	409 211 7301	IC MC14053BF
	409 051 2900	IC TC4053BF-TP1
IC3121	409 461 7304	IC AD8057ART
IC3131	409 461 7304	IC AD8057ART
IC3141	409 461 7304	IC AD8057ART
IC3161	409 428 8405	IC TC7WT125FU-TE12L
IC3181	409 323 8906	IC TC4W53FU(TE12L)
IC3531	409 502 3203	IC L3E01031F0A
IC3551	409 390 0001	IC LM7171AIMX
	409 486 7709	IC LM7171BIMX
IC3561	409 502 3203	IC L3E01031F0A
IC3581	409 343 0201	IC LT1206CS8
IC3801	409 380 6303	IC HIN232CB
	409 273 3501	IC SP232ACT
IC3821	410 296 5700	IC TWM7000-151020
IC3831	409 404 7200	IC TC7SET00FU-(TE85L)
IC3841	410 275 5707	IC TWM7000-162020
	410 275 5806	IC TWM7000-162020
IC401	409 502 3401	IC QL3E07050 K0A
IC4101	409 474 0002	IC CXA2101AQ
IC4186	409 428 8405	IC TC7WT125FU-TE12L
IC501	409 502 3302	IC L3E06070D0A
IC5211	409 461 7403	IC LT1399CS
IC5241	409 470 2604	IC AD8183ARU

Key No.	Part No.	Description
IC5251	409 357 6602	IC LT1260CS
IC5261	410 343 7008	IC SN74AHCT1G14DBVR
IC5271	409 461 7304	IC AD8057ART
IC5281	409 461 7304	IC AD8057ART
IC5291	409 461 7304	IC AD8057ART
IC531	409 502 3302	IC L3E06070D0A
IC561	409 502 3302	IC L3E06070D0A
IC6101	409 431 6009	IC MC74VHC14DT
	410 356 8009	IC SN74LV14APWR
IC6121	409 158 5804	IC TC74HC123AF-TP1
IC6141	409 158 5804	IC TC74HC123AF-TP1
IC6211	409 461 7304	IC AD8057ART
IC6221	409 461 7304	IC AD8057ART
IC6241	409 484 2003	IC BA7078AF-E2
IC6251	409 431 6009	IC MC74VHC14DT
	410 356 8009	IC SN74LV14APWR
IC6261	409 211 7301	IC MC14053BF
	409 051 2900	IC TC4053BF-TP1
IC6271	410 354 6304	IC SN74LVC126APWR
IC6281	409 429 6806	IC TC74LCX74FT-(EL)
IC6621	409 124 5708	IC L78M09T-TR
IC6631	409 416 6406	IC BA033FP-E2
IC6641	409 416 6406	IC BA033FP-E2
IC6651	409 416 6406	IC BA033FP-E2
IC6661	409 499 1701	IC PQ025EZ01ZP
	409 461 7700	IC PQ2TZ15
IC6671	409 499 1701	IC PQ025EZ01ZP
	409 461 7700	IC PQ2TZ15
IC801	410 448 7606	IC HD64F2238ATE13-B995A
IC8121	409 211 7301	IC MC14053BF
	409 051 2900	IC TC4053BF-TP1
IC8131	409 462 0304	IC 24LC21AT/SN
IC841	409 433 4201	IC MN13821-H-TX
IC9801	409 468 8908	IC ML60851CTB
	409 521 4502	IC ML60851DTB

CAPACITOR

Key No.	Part No.	Description			
C1101	403 304 2105	ELECT	47U	M	6.3V
C1102	403 164 0204	CERAMIC	0.1U	Z	25V
C1103	403 304 2105	ELECT	47U	M	6.3V
C1104	403 164 0204	CERAMIC	0.1U	Z	25V
C1105	403 304 2105	ELECT	47U	M	6.3V
C1106	403 164 0204	CERAMIC	0.1U	Z	25V
C1107	403 304 2105	ELECT	47U	M	6.3V
C1108	403 164 0204	CERAMIC	0.1U	Z	25V
C111	403 304 3300	ELECT	47U	M	16V
C1111	403 164 0204	CERAMIC	0.1U	Z	25V
C1112	403 164 0204	CERAMIC	0.1U	Z	25V
C1113	403 164 0204	CERAMIC	0.1U	Z	25V
C1114	403 149 9208	CERAMIC	0.01U	Z	50V
C1115	403 157 2901	CERAMIC	47P	J	50V
C1116	403 164 0204	CERAMIC	0.1U	Z	25V
C1117	403 164 0204	CERAMIC	0.1U	Z	25V
C1118	403 164 0204	CERAMIC	0.1U	Z	25V
C1119	403 162 5300	ELECT	4.7U	M	25V
C112	403 164 0204	CERAMIC	0.1U	Z	25V
C1121	403 157 1805	CERAMIC	9P	D	50V
C1122	403 164 0204	CERAMIC	0.1U	Z	25V
C1123	403 149 9208	CERAMIC	0.01U	Z	50V
C1124	403 162 6000	ELECT	0.47U	M	50V
C1126	403 164 0204	CERAMIC	0.1U	Z	25V
C1127	403 149 9208	CERAMIC	0.01U	Z	50V
C1128	403 164 0204	CERAMIC	0.1U	Z	25V
C1129	403 164 0204	CERAMIC	0.1U	Z	25V
C1131	403 215 2904	CERAMIC	0.022U	K	25V
C1132	403 162 6604	ELECT	2.2U	M	50V
C1133	403 113 3805	CERAMIC	1000P	K	50V
C1161	403 155 4204	CERAMIC	15P	J	50V
C1171	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C1172	403 164 0204	CERAMIC	0.1U	Z	25V
C122	403 164 0204	CERAMIC	0.1U	Z	25V
C123	403 266 8108	NP-ELECT	1U	M	50V
C1301	403 164 0204	CERAMIC	0.1U	Z	25V
C131	403 164 0204	CERAMIC	0.1U	Z	25V
C1311	403 164 0204	CERAMIC	0.1U	Z	25V
C1331	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C1332	403 164 0204	CERAMIC	0.1U	Z	25V
C1333	403 164 0204	CERAMIC	0.1U	Z	25V
C1342	403 164 0204	CERAMIC	0.1U	Z	25V
C1351	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C1352	403 164 0204	CERAMIC	0.1U	Z	25V
C1362	403 164 0204	CERAMIC	0.1U	Z	25V
C1371	403 164 0204	CERAMIC	0.1U	Z	25V
C1401	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C1402	403 164 0204	CERAMIC	0.1U	Z	25V
C1403	403 164 0204	CERAMIC	0.1U	Z	25V
C1404	403 164 0204	CERAMIC	0.1U	Z	25V
C1406	403 164 0204	CERAMIC	0.1U	Z	25V
C1407	403 164 0204	CERAMIC	0.1U	Z	25V
C1408	403 164 0204	CERAMIC	0.1U	Z	25V
C1409	403 164 0204	CERAMIC	0.1U	Z	25V
C1411	403 164 0204	CERAMIC	0.1U	Z	25V
C1412	403 164 0204	CERAMIC	0.1U	Z	25V
C1413	403 164 0204	CERAMIC	0.1U	Z	25V
C1414	403 164 0204	CERAMIC	0.1U	Z	25V
C1416	403 164 0204	CERAMIC	0.1U	Z	25V
C151	403 304 3300	ELECT	47U	M	16V
C152	403 164 0204	CERAMIC	0.1U	Z	25V
C153	403 267 0804	NP-ELECT	47U	M	6.3V
C154	403 164 0204	CERAMIC	0.1U	Z	25V
C1581	403 164 0204	CERAMIC	0.1U	Z	25V
C1582	403 304 2105	ELECT	47U	M	6.3V
C1583	403 164 0204	CERAMIC	0.1U	Z	25V
C171	403 164 0204	CERAMIC	0.1U	Z	25V
C1801	403 164 0204	CERAMIC	0.1U	Z	25V
C1811	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C1812	403 164 0204	CERAMIC	0.1U	Z	25V
C1821	403 164 0204	CERAMIC	0.1U	Z	25V
C1826	403 164 0204	CERAMIC	0.1U	Z	25V
C1831	403 304 2105	ELECT	47U	M	6.3V
C1832	403 164 0204	CERAMIC	0.1U	Z	25V
C1833	403 304 2105	ELECT	47U	M	6.3V
C1834	403 164 0204	CERAMIC	0.1U	Z	25V
C1861	403 164 0204	CERAMIC	0.1U	Z	25V
C1871	403 164 0204	CERAMIC	0.1U	Z	25V
C1881	403 164 0204	CERAMIC	0.1U	Z	25V
C201	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C202	403 164 0204	CERAMIC	0.1U	Z	25V
C203	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C204	403 164 0204	CERAMIC	0.1U	Z	25V
C205	403 322 7809	ELECT	220U	M	6.3V
	403 349 4706	ELECT	220U	M	6.3V
C206	403 164 0204	CERAMIC	0.1U	Z	25V
C2101	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C2102	403 164 0204	CERAMIC	0.1U	Z	25V
C2103	403 304 1801	ELECT	100U	M	6.3V

Key No.	Part No.	Description		
	403 373 7704	ELECT	100U M	6.3V
C2104	403 164 0204	CERAMIC	0.1U Z	25V
C2105	403 304 1801	ELECT	100U M	6.3V
	403 373 7704	ELECT	100U M	6.3V
C2106	403 164 0204	CERAMIC	0.1U Z	25V
C211	403 215 2102	CERAMIC	8200P K	50V
C2111	403 175 4802	NP-ELECT	10U M	10V
C2112	403 164 0204	CERAMIC	0.1U Z	25V
C2113	403 164 0204	CERAMIC	0.1U Z	25V
C2117	403 164 0204	CERAMIC	0.1U Z	25V
C2118	403 164 0204	CERAMIC	0.1U Z	25V
C2119	403 164 0204	CERAMIC	0.1U Z	25V
C212	403 205 2808	CERAMIC	0.047U K	25V
C2121	403 164 0204	CERAMIC	0.1U Z	25V
C2124	403 149 9208	CERAMIC	0.01U Z	50V
C2126	403 149 9208	CERAMIC	0.01U Z	50V
C2127	403 215 2904	CERAMIC	0.022U K	25V
C213	403 338 0108	CERAMIC	0.039U K	25V
C2161	403 304 2105	ELECT	47U M	6.3V
C2162	403 164 0204	CERAMIC	0.1U Z	25V
C2163	403 304 2105	ELECT	47U M	6.3V
C2164	403 164 0204	CERAMIC	0.1U Z	25V
C221	403 298 9609	CERAMIC	0.1U K	16V
	403 325 3303	CERAMIC	0.1U K	16V
C2501	403 164 0204	CERAMIC	0.1U Z	25V
C2502	403 164 0204	CERAMIC	0.1U Z	25V
C2503	403 164 0204	CERAMIC	0.1U Z	25V
C2506	403 164 0204	CERAMIC	0.1U Z	25V
C2507	403 304 3508	ELECT	10U M	25V
C2508	403 164 0204	CERAMIC	0.1U Z	25V
C251	403 164 0204	CERAMIC	0.1U Z	25V
C2511	403 164 0204	CERAMIC	0.1U Z	25V
C2512	403 164 0204	CERAMIC	0.1U Z	25V
C2513	403 164 0204	CERAMIC	0.1U Z	25V
C2516	403 164 0204	CERAMIC	0.1U Z	25V
C2517	403 304 3508	ELECT	10U M	25V
C2518	403 164 0204	CERAMIC	0.1U Z	25V
C2521	403 164 0204	CERAMIC	0.1U Z	25V
C2522	403 164 0204	CERAMIC	0.1U Z	25V
C2523	403 164 0204	CERAMIC	0.1U Z	25V
C2526	403 164 0204	CERAMIC	0.1U Z	25V
C2527	403 304 3508	ELECT	10U M	25V
C2528	403 164 0204	CERAMIC	0.1U Z	25V
C2571	403 164 0204	CERAMIC	0.1U Z	25V
C2572	403 304 2105	ELECT	47U M	6.3V
C2573	403 164 0204	CERAMIC	0.1U Z	25V
C2591	403 229 3508	ELECT	100U M	16V
	403 335 0408	ELECT	100U M	16V
C2807	403 157 2901	CERAMIC	47P J	50V
C2821	403 164 0204	CERAMIC	0.1U Z	25V
C2822	403 164 0204	CERAMIC	0.1U Z	25V
C2823	403 164 0204	CERAMIC	0.1U Z	25V
C2882	403 164 0204	CERAMIC	0.1U Z	25V
C301	403 322 7809	ELECT	220U M	6.3V
	403 349 4706	ELECT	220U M	6.3V
C302	403 164 0204	CERAMIC	0.1U Z	25V
C303	403 322 7809	ELECT	220U M	6.3V
	403 349 4706	ELECT	220U M	6.3V
C304	403 164 0204	CERAMIC	0.1U Z	25V
C306	403 164 0204	CERAMIC	0.1U Z	25V
C307	403 164 0204	CERAMIC	0.1U Z	25V
C308	403 164 0204	CERAMIC	0.1U Z	25V
C309	403 164 0204	CERAMIC	0.1U Z	25V
C3101	403 162 4709	ELECT	10U M	16V
	403 335 0309	ELECT	10U M	16V
C3102	403 162 4709	ELECT	10U M	16V
	403 335 0309	ELECT	10U M	16V
C3103	403 164 0204	CERAMIC	0.1U Z	25V
C3104	403 162 4709	ELECT	10U M	16V
	403 335 0309	ELECT	10U M	16V
C311	403 164 0204	CERAMIC	0.1U Z	25V
C3112	403 163 9802	CERAMIC	0.047U Z	25V
C3113	403 163 9802	CERAMIC	0.047U Z	25V
C312	403 164 0204	CERAMIC	0.1U Z	25V
C3122	403 157 1904	CERAMIC	10P D	50V
C3126	403 304 1801	ELECT	100U M	6.3V
	403 373 7704	ELECT	100U M	6.3V
C3127	403 164 0204	CERAMIC	0.1U Z	25V
C313	403 164 0204	CERAMIC	0.1U Z	25V
C3132	403 157 1904	CERAMIC	10P D	50V
C314	403 164 0204	CERAMIC	0.1U Z	25V
C3142	403 157 1904	CERAMIC	10P D	50V
C316	403 164 0204	CERAMIC	0.1U Z	25V
C3161	403 164 0204	CERAMIC	0.1U Z	25V
C317	403 164 0204	CERAMIC	0.1U Z	25V
C318	403 164 0204	CERAMIC	0.1U Z	25V
C319	403 164 0204	CERAMIC	0.1U Z	25V
C321	403 164 0204	CERAMIC	0.1U Z	25V
C322	403 164 0204	CERAMIC	0.1U Z	25V
C323	403 164 0204	CERAMIC	0.1U Z	25V
C324	403 164 0204	CERAMIC	0.1U Z	25V
C3532	403 164 0204	CERAMIC	0.1U Z	25V
C3533	403 229 3508	ELECT	100U M	16V
	403 335 0408	ELECT	100U M	16V
C3534	403 164 0204	CERAMIC	0.1U Z	25V
C3536	403 164 0204	CERAMIC	0.1U Z	25V
C3538	403 164 0204	CERAMIC	0.1U Z	25V
C3539	403 164 0204	CERAMIC	0.1U Z	25V
C3551	403 229 3508	ELECT	100U M	16V
	403 335 0408	ELECT	100U M	16V
C3552	403 164 0204	CERAMIC	0.1U Z	25V
C3553	403 157 3601	CERAMIC	100P J	50V
C3562	403 164 0204	CERAMIC	0.1U Z	25V
C3563	403 229 3508	ELECT	100U M	16V
	403 335 0408	ELECT	100U M	16V
C3564	403 164 0204	CERAMIC	0.1U Z	25V
C3566	403 164 0204	CERAMIC	0.1U Z	25V
C3568	403 164 0204	CERAMIC	0.1U Z	25V
C3569	403 164 0204	CERAMIC	0.1U Z	25V
C3581	403 229 3508	ELECT	100U M	16V
	403 335 0408	ELECT	100U M	16V
C3582	403 164 0204	CERAMIC	0.1U Z	25V
C3583	403 157 3601	CERAMIC	100P J	50V
C3584	403 149 9208	CERAMIC	0.01U Z	50V
C3592	403 162 4709	ELECT	10U M	16V
	403 335 0309	ELECT	10U M	16V
C3801	403 164 0204	CERAMIC	0.1U Z	25V
C3802	403 162 6208	ELECT	1U M	50V
C3803	403 162 6208	ELECT	1U M	50V
C3804	403 162 6208	ELECT	1U M	50V
C3806	403 162 6208	ELECT	1U M	50V
C3821	403 164 0204	CERAMIC	0.1U Z	25V
C3831	403 164 0204	CERAMIC	0.1U Z	25V
C3841	403 162 6208	ELECT	1U M	50V
C3842	403 164 0204	CERAMIC	0.1U Z	25V
C3843	403 164 0204	CERAMIC	0.1U Z	25V
C3844	403 304 2105	ELECT	47U M	6.3V
C401	403 322 7809	ELECT	220U M	6.3V
	403 349 4706	ELECT	220U M	6.3V
C402	403 164 0204	CERAMIC	0.1U Z	25V
C403	403 322 7809	ELECT	220U M	6.3V
	403 349 4706	ELECT	220U M	6.3V
C404	403 164 0204	CERAMIC	0.1U Z	25V
C406	403 164 0204	CERAMIC	0.1U Z	25V

Key No.	Part No.	Description			
C407	403 164 0204	CERAMIC	0.1U	Z	25V
C408	403 164 0204	CERAMIC	0.1U	Z	25V
C409	403 164 0204	CERAMIC	0.1U	Z	25V
C4102	403 164 0204	CERAMIC	0.1U	Z	25V
C4103	403 280 1604	ELECT	220U	M	16V
C4104	403 164 0204	CERAMIC	0.1U	Z	25V
C4105	403 304 3300	ELECT	47U	M	16V
C4106	403 164 0204	CERAMIC	0.1U	Z	25V
C411	403 164 0204	CERAMIC	0.1U	Z	25V
C4116	403 164 0204	CERAMIC	0.1U	Z	25V
C412	403 164 0204	CERAMIC	0.1U	Z	25V
C4127	403 283 6309	CERAMIC	1U	Z	10V
C413	403 164 0204	CERAMIC	0.1U	Z	25V
C4134	403 149 9208	CERAMIC	0.01U	Z	50V
C4137	403 283 6309	CERAMIC	1U	Z	10V
C4138	403 164 0204	CERAMIC	0.1U	Z	25V
C4139	403 164 0204	CERAMIC	0.1U	Z	25V
C414	403 164 0204	CERAMIC	0.1U	Z	25V
C4141	403 164 0204	CERAMIC	0.1U	Z	25V
C4142	403 162 4709	ELECT	10U	M	16V
	403 335 0309	ELECT	10U	M	16V
C4143	403 162 6000	ELECT	0.47U	M	50V
C4144	403 149 9208	CERAMIC	0.01U	Z	50V
C4146	403 162 4709	ELECT	10U	M	16V
	403 335 0309	ELECT	10U	M	16V
C4147	403 164 0204	CERAMIC	0.1U	Z	25V
C4148	403 149 9208	CERAMIC	0.01U	Z	50V
C4149	403 149 9208	CERAMIC	0.01U	Z	50V
C4151	403 149 9208	CERAMIC	0.01U	Z	50V
C4152	403 149 9208	CERAMIC	0.01U	Z	50V
C4153	403 149 9208	CERAMIC	0.01U	Z	50V
C4154	403 149 9208	CERAMIC	0.01U	Z	50V
C4156	403 162 4709	ELECT	10U	M	16V
	403 335 0309	ELECT	10U	M	16V
C4158	403 162 6000	ELECT	0.47U	M	50V
C4159	403 149 9208	CERAMIC	0.01U	Z	50V
C416	403 164 0204	CERAMIC	0.1U	Z	25V
C4161	403 149 9208	CERAMIC	0.01U	Z	50V
C4162	403 149 9208	CERAMIC	0.01U	Z	50V
C4163	403 164 0204	CERAMIC	0.1U	Z	25V
C4164	403 164 0204	CERAMIC	0.1U	Z	25V
C4166	403 164 0204	CERAMIC	0.1U	Z	25V
C4167	403 164 0204	CERAMIC	0.1U	Z	25V
C4168	403 164 0204	CERAMIC	0.1U	Z	25V
C4169	403 164 0204	CERAMIC	0.1U	Z	25V
C417	403 164 0204	CERAMIC	0.1U	Z	25V
C4176	403 164 0204	CERAMIC	0.1U	Z	25V
C4177	403 175 4802	NP-ELECT	10U	M	10V
C418	403 164 0204	CERAMIC	0.1U	Z	25V
C4186	403 164 0204	CERAMIC	0.1U	Z	25V
C419	403 164 0204	CERAMIC	0.1U	Z	25V
C421	403 164 0204	CERAMIC	0.1U	Z	25V
C422	403 164 0204	CERAMIC	0.1U	Z	25V
C423	403 164 0204	CERAMIC	0.1U	Z	25V
C501	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C502	403 164 0204	CERAMIC	0.1U	Z	25V
C503	403 304 3300	ELECT	47U	M	16V
C504	403 164 0204	CERAMIC	0.1U	Z	25V
C506	403 164 0204	CERAMIC	0.1U	Z	25V
C507	403 164 0204	CERAMIC	0.1U	Z	25V
C508	403 164 0204	CERAMIC	0.1U	Z	25V
C509	403 164 0204	CERAMIC	0.1U	Z	25V
C511	403 164 0204	CERAMIC	0.1U	Z	25V
C512	403 164 0204	CERAMIC	0.1U	Z	25V
C513	403 164 0204	CERAMIC	0.1U	Z	25V
C5201	403 304 2105	ELECT	47U	M	6.3V
C5202	403 164 0204	CERAMIC	0.1U	Z	25V
C5203	403 304 2105	ELECT	47U	M	6.3V
C5204	403 164 0204	CERAMIC	0.1U	Z	25V
C5206	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C5207	403 283 6309	CERAMIC	1U	Z	10V
C5208	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C5209	403 283 6309	CERAMIC	1U	Z	10V
C521	403 164 0204	CERAMIC	0.1U	Z	25V
C5211	403 157 1508	CERAMIC	3P	C	50V
C5212	403 157 1508	CERAMIC	3P	C	50V
C5213	403 157 1508	CERAMIC	3P	C	50V
C522	403 164 0204	CERAMIC	0.1U	Z	25V
C5231	403 162 4006	ELECT	22U	M	6.3V
C5232	403 162 4006	ELECT	22U	M	6.3V
C5233	403 162 4006	ELECT	22U	M	6.3V
C5241	403 164 0204	CERAMIC	0.1U	Z	25V
C5242	403 164 0204	CERAMIC	0.1U	Z	25V
C5243	403 164 0204	CERAMIC	0.1U	Z	25V
C5244	403 149 9208	CERAMIC	0.01U	Z	50V
C5246	403 267 0804	NP-ELECT	47U	M	6.3V
C5247	403 267 0804	NP-ELECT	47U	M	6.3V
C5248	403 267 0804	NP-ELECT	47U	M	6.3V
C5251	403 164 0204	CERAMIC	0.1U	Z	25V
C5252	403 164 0204	CERAMIC	0.1U	Z	25V
C5253	403 164 0204	CERAMIC	0.1U	Z	25V
C5256	403 304 3300	ELECT	47U	M	16V
C5257	403 164 0204	CERAMIC	0.1U	Z	25V
C5258	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C5259	403 164 0204	CERAMIC	0.1U	Z	25V
C5261	403 164 0204	CERAMIC	0.1U	Z	25V
C5271	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C5272	403 283 6309	CERAMIC	1U	Z	10V
C5273	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C5274	403 283 6309	CERAMIC	1U	Z	10V
C5276	403 157 1904	CERAMIC	10P	D	50V
C5277	403 157 2901	CERAMIC	47P	J	50V
C5286	403 157 1904	CERAMIC	10P	D	50V
C5287	403 139 7504	CERAMIC	39P	J	50V
C5296	403 157 1904	CERAMIC	10P	D	50V
C5297	403 157 2901	CERAMIC	47P	J	50V
C531	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C532	403 164 0204	CERAMIC	0.1U	Z	25V
C533	403 304 3300	ELECT	47U	M	16V
C534	403 164 0204	CERAMIC	0.1U	Z	25V
C536	403 164 0204	CERAMIC	0.1U	Z	25V
C537	403 164 0204	CERAMIC	0.1U	Z	25V
C538	403 164 0204	CERAMIC	0.1U	Z	25V
C539	403 164 0204	CERAMIC	0.1U	Z	25V
C541	403 164 0204	CERAMIC	0.1U	Z	25V
C542	403 164 0204	CERAMIC	0.1U	Z	25V
C543	403 164 0204	CERAMIC	0.1U	Z	25V
C551	403 164 0204	CERAMIC	0.1U	Z	25V
C552	403 164 0204	CERAMIC	0.1U	Z	25V
C561	403 304 1801	ELECT	100U	M	6.3V
	403 373 7704	ELECT	100U	M	6.3V
C562	403 164 0204	CERAMIC	0.1U	Z	25V
C563	403 304 3300	ELECT	47U	M	16V
C564	403 164 0204	CERAMIC	0.1U	Z	25V
C566	403 164 0204	CERAMIC	0.1U	Z	25V
C567	403 164 0204	CERAMIC	0.1U	Z	25V
C568	403 164 0204	CERAMIC	0.1U	Z	25V

Key No.	Part No.	Description			
C569	403 164 0204	CERAMIC	0.1U Z	25V	
C571	403 164 0204	CERAMIC	0.1U Z	25V	
C572	403 164 0204	CERAMIC	0.1U Z	25V	
C573	403 164 0204	CERAMIC	0.1U Z	25V	
C581	403 164 0204	CERAMIC	0.1U Z	25V	
C582	403 164 0204	CERAMIC	0.1U Z	25V	
C6101	403 164 0204	CERAMIC	0.1U Z	25V	
C6121	403 164 0204	CERAMIC	0.1U Z	25V	
C6127	403 155 1302	CERAMIC	150P J	50V	
C6131	403 163 9802	CERAMIC	0.047U Z	25V	
C6141	403 164 0204	CERAMIC	0.1U Z	25V	
C6147	403 163 9802	CERAMIC	0.047U Z	25V	
C6151	403 163 9802	CERAMIC	0.047U Z	25V	
C6202	403 164 0204	CERAMIC	0.1U Z	25V	
C6204	403 164 0204	CERAMIC	0.1U Z	25V	
C6211	403 157 3601	CERAMIC	100P J	50V	
C6212	403 348 5803	CERAMIC	0.47U K	10V	
C6216	403 157 1904	CERAMIC	10P D	50V	
C6221	403 157 3601	CERAMIC	100P J	50V	
C6222	401 105 7909	MT-GLAZE	0.000 ZA	1/16W	
C6226	403 157 1904	CERAMIC	10P D	50V	
C6241	403 304 1801	ELECT	100U M	6.3V	
	403 373 7704	ELECT	100U M	6.3V	
C6242	403 164 0204	CERAMIC	0.1U Z	25V	
C6243	403 205 7803	TA-SOLID	2.2U M	16V	
C6244	403 205 7803	TA-SOLID	2.2U M	16V	
C6245	403 162 6208	ELECT	1U M	50V	
C6246	403 348 5803	CERAMIC	0.47U K	10V	
C6247	403 162 6604	ELECT	2.2U M	50V	
C6248	403 162 6208	ELECT	1U M	50V	
C6249	403 157 3601	CERAMIC	100P J	50V	
C6251	403 164 0204	CERAMIC	0.1U Z	25V	
C6261	403 164 0204	CERAMIC	0.1U Z	25V	
C6265	403 157 3809	CERAMIC	120P J	50V	
C6266	403 157 3809	CERAMIC	120P J	50V	
C6267	403 157 3809	CERAMIC	120P J	50V	
C6268	403 157 3809	CERAMIC	120P J	50V	
C6271	403 164 0204	CERAMIC	0.1U Z	25V	
C6281	403 164 0204	CERAMIC	0.1U Z	25V	
C6601	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6602	403 164 0204	CERAMIC	0.1U Z	25V	
C6603	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6604	403 164 0204	CERAMIC	0.1U Z	25V	
C6606	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6607	403 164 0204	CERAMIC	0.1U Z	25V	
C6611	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6612	403 164 0204	CERAMIC	0.1U Z	25V	
C6613	403 280 1604	ELECT	220U M	16V	
C6614	403 164 0204	CERAMIC	0.1U Z	25V	
C6616	403 280 1604	ELECT	220U M	16V	
C6617	403 280 1604	ELECT	220U M	16V	
C6621	403 229 3508	ELECT	100U M	16V	
	403 335 0408	ELECT	100U M	16V	
C6622	403 164 0204	CERAMIC	0.1U Z	25V	
C6623	403 229 3508	ELECT	100U M	16V	
	403 335 0408	ELECT	100U M	16V	
C6624	403 164 0204	CERAMIC	0.1U Z	25V	
C6631	403 229 3508	ELECT	100U M	16V	
	403 335 0408	ELECT	100U M	16V	
C6632	403 164 0204	CERAMIC	0.1U Z	25V	
C6633	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6634	403 164 0204	CERAMIC	0.1U Z	25V	
C6642	403 164 0204	CERAMIC	0.1U Z	25V	
C6643	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6644	403 164 0204	CERAMIC	0.1U Z	25V	
C6652	403 164 0204	CERAMIC	0.1U Z	25V	
C6653	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6654	403 164 0204	CERAMIC	0.1U Z	25V	
C6662	403 164 0204	CERAMIC	0.1U Z	25V	
C6663	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6664	403 164 0204	CERAMIC	0.1U Z	25V	
C6665	403 164 0204	CERAMIC	0.1U Z	25V	
C6672	403 164 0204	CERAMIC	0.1U Z	25V	
C6673	403 322 7809	ELECT	220U M	6.3V	
	403 349 4706	ELECT	220U M	6.3V	
C6674	403 164 0204	CERAMIC	0.1U Z	25V	
C6675	403 164 0204	CERAMIC	0.1U Z	25V	
C801	403 304 1801	ELECT	100U M	6.3V	
	403 373 7704	ELECT	100U M	6.3V	
C802	403 164 0204	CERAMIC	0.1U Z	25V	
C811	403 164 0204	CERAMIC	0.1U Z	25V	
C812	403 164 0204	CERAMIC	0.1U Z	25V	
C8121	403 304 1801	ELECT	100U M	6.3V	
	403 373 7704	ELECT	100U M	6.3V	
C8122	403 164 0204	CERAMIC	0.1U Z	25V	
C813	403 164 0204	CERAMIC	0.1U Z	25V	
C814	403 164 0204	CERAMIC	0.1U Z	25V	
C841	403 304 2105	ELECT	47U M	6.3V	
C842	403 164 0204	CERAMIC	0.1U Z	25V	
C843	403 162 4709	ELECT	10U M	16V	
	403 335 0309	ELECT	10U M	16V	
C844	403 283 6309	CERAMIC	1U Z	10V	
C846	403 164 0204	CERAMIC	0.1U Z	25V	
C851	403 145 9905	CERAMIC	22P J	50V	
C852	403 145 9905	CERAMIC	22P J	50V	
C9802	403 164 0204	CERAMIC	0.1U Z	25V	
C9803	403 164 0204	CERAMIC	0.1U Z	25V	
C9804	403 164 0204	CERAMIC	0.1U Z	25V	
C9806	403 164 0204	CERAMIC	0.1U Z	25V	
C9811	403 113 3805	CERAMIC	1000P K	50V	
C9812	403 153 9102	CERAMIC	5P C	50V	
C9813	403 164 0204	CERAMIC	0.1U Z	25V	
RESISTOR					
RB1431	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1432	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1433	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1434	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1435	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1436	645 037 0663	R-NETWORK	22X4	0.063W	
	645 033 2210	R-NETWORK	22X4	1/16W	
RB1441	645 037 0656	R-NETWORK	0X4	0.063W	
	645 027 1519	R-NETWORK	0X4	1/16W	
RB1442	645 037 0656	R-NETWORK	0X4	0.063W	
	645 027 1519	R-NETWORK	0X4	1/16W	
RB1443	645 037 0656	R-NETWORK	0X4	0.063W	
	645 027 1519	R-NETWORK	0X4	1/16W	
RB1444	645 037 0656	R-NETWORK	0X4	0.063W	
	645 027 1519	R-NETWORK	0X4	1/16W	
RB1445	645 037 0656	R-NETWORK	0X4	0.063W	
	645 027 1519	R-NETWORK	0X4	1/16W	

Key No.	Part No.	Description
RB1446	645 037 0656	R-NETWORK 0X4 0.063W
	645 027 1519	R-NETWORK 0X4 1/16W
RB301	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB302	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB303	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB304	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB305	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB306	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB307	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB308	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB309	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB310	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB311	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB312	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB3821	645 020 7822	R-NETWORK 10KX4 0.063W
	645 026 8014	R-NETWORK 10KX4 1/16W
RB411	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB412	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB413	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB414	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB415	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB416	645 037 0663	R-NETWORK 22X4 0.063W
	645 033 2210	R-NETWORK 22X4 1/16W
RB501	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB502	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB503	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB531	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB532	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB533	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB561	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB562	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB563	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5998	R-NETWORK 10X4 1/16W
RB9801	645 021 0365	R-NETWORK 100KX4 0.063W
	645 026 8021	R-NETWORK 100KX4 1/16W
RB9802	645 021 0365	R-NETWORK 100KX4 0.063W
	645 026 8021	R-NETWORK 100KX4 1/16W
R110	401 105 0405	MT-GLAZE 100 JA 1/16W
R1101	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1102	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R1103	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R1104	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R1105	401 105 0405	MT-GLAZE 100 JA 1/16W
R1106	401 105 0405	MT-GLAZE 100 JA 1/16W
R1122	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1123	401 105 3406	MT-GLAZE 27K JA 1/16W
R1127	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1129	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R113	401 105 0504	MT-GLAZE 1K JA 1/16W
R1131	401 105 3406	MT-GLAZE 27K JA 1/16W
R1132	401 105 7503	MT-GLAZE 82K JA 1/16W
R1133	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R1134	401 105 0504	MT-GLAZE 1K JA 1/16W
R1136	401 105 0504	MT-GLAZE 1K JA 1/16W
R1137	401 105 0405	MT-GLAZE 100 JA 1/16W
R1139	401 105 0504	MT-GLAZE 1K JA 1/16W
R114	401 105 6506	MT-GLAZE 680 JA 1/16W
R1141	401 105 5905	MT-GLAZE 560 JA 1/16W
R1142	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R1143	401 105 0504	MT-GLAZE 1K JA 1/16W
R1144	401 105 5905	MT-GLAZE 560 JA 1/16W
R1145	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R1146	401 105 0504	MT-GLAZE 1K JA 1/16W
R1147	401 105 5905	MT-GLAZE 560 JA 1/16W
R1148	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R1149	401 105 0504	MT-GLAZE 1K JA 1/16W
R1151	401 105 0405	MT-GLAZE 100 JA 1/16W
R1152	401 105 0504	MT-GLAZE 1K JA 1/16W
R1153	401 105 0405	MT-GLAZE 100 JA 1/16W
R1154	401 105 0504	MT-GLAZE 1K JA 1/16W
R1155	401 105 0405	MT-GLAZE 100 JA 1/16W
R1156	401 105 0504	MT-GLAZE 1K JA 1/16W
R116	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R1161	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1162	401 105 0504	MT-GLAZE 1K JA 1/16W
R121	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R123	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1301	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R131	401 105 0405	MT-GLAZE 100 JA 1/16W
R1311	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1312	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1313	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R132	401 105 0504	MT-GLAZE 1K JA 1/16W
R133	401 105 0405	MT-GLAZE 100 JA 1/16W
R134	401 105 0504	MT-GLAZE 1K JA 1/16W
R1341	401 105 0603	MT-GLAZE 10K JA 1/16W
R1342	401 105 0603	MT-GLAZE 10K JA 1/16W
R1344	401 105 0603	MT-GLAZE 10K JA 1/16W
R1346	401 105 0603	MT-GLAZE 10K JA 1/16W
R1352	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1353	401 105 0603	MT-GLAZE 10K JA 1/16W
R1357	401 105 0603	MT-GLAZE 10K JA 1/16W
R1362	401 113 4402	MT-GLAZE 75 JA 1/16W
R1371	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R1372	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R1373	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1431	401 105 2607	MT-GLAZE 22 JA 1/16W
R1432	401 105 2607	MT-GLAZE 22 JA 1/16W
R1433	401 105 2607	MT-GLAZE 22 JA 1/16W
R1434	401 105 2607	MT-GLAZE 22 JA 1/16W
R1435	401 105 2607	MT-GLAZE 22 JA 1/16W
R1436	401 105 2607	MT-GLAZE 22 JA 1/16W
R1441	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1442	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1443	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1444	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1445	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1446	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R152	401 105 8104	MT-GLAZE 56K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description
R153	401 105 3406	MT-GLAZE 27K JA 1/16W
R154	401 105 0504	MT-GLAZE 1K JA 1/16W
R156	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R157	401 105 6506	MT-GLAZE 680 JA 1/16W
R158	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R1581	401 105 0405	MT-GLAZE 100 JA 1/16W
R1582	401 105 0405	MT-GLAZE 100 JA 1/16W
R1583	401 105 0603	MT-GLAZE 10K JA 1/16W
R1584	401 105 0603	MT-GLAZE 10K JA 1/16W
R1586	401 105 0603	MT-GLAZE 10K JA 1/16W
R1587	401 105 0405	MT-GLAZE 100 JA 1/16W
R1588	401 105 0405	MT-GLAZE 100 JA 1/16W
R1589	401 105 0405	MT-GLAZE 100 JA 1/16W
R159	401 105 0504	MT-GLAZE 1K JA 1/16W
R1591	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R1592	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R1593	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R171	401 105 7503	MT-GLAZE 82K JA 1/16W
R172	401 105 3406	MT-GLAZE 27K JA 1/16W
R173	401 105 0504	MT-GLAZE 1K JA 1/16W
R174	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R176	401 105 6506	MT-GLAZE 680 JA 1/16W
R177	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R178	401 105 0504	MT-GLAZE 1K JA 1/16W
R1801	401 105 0405	MT-GLAZE 100 JA 1/16W
R1802	401 105 0405	MT-GLAZE 100 JA 1/16W
R1816	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1817	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1818	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1819	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1831	401 105 0405	MT-GLAZE 100 JA 1/16W
R1832	401 105 0405	MT-GLAZE 100 JA 1/16W
R1833	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1834	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1836	401 105 0405	MT-GLAZE 100 JA 1/16W
R1837	401 105 0405	MT-GLAZE 100 JA 1/16W
R1851	401 105 0405	MT-GLAZE 100 JA 1/16W
R1852	401 105 0405	MT-GLAZE 100 JA 1/16W
R1853	401 105 0603	MT-GLAZE 10K JA 1/16W
R1855	401 105 0603	MT-GLAZE 10K JA 1/16W
R1861	401 105 0405	MT-GLAZE 100 JA 1/16W
R1862	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1863	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1864	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1876	401 105 0405	MT-GLAZE 100 JA 1/16W
R1877	401 105 0405	MT-GLAZE 100 JA 1/16W
R1878	401 105 0405	MT-GLAZE 100 JA 1/16W
R1879	401 105 0504	MT-GLAZE 1K JA 1/16W
R1881	401 105 0405	MT-GLAZE 100 JA 1/16W
R1882	401 105 0405	MT-GLAZE 100 JA 1/16W
R1883	401 105 0405	MT-GLAZE 100 JA 1/16W
R1884	401 105 4502	MT-GLAZE 390 JA 1/16W
R1886	401 105 4502	MT-GLAZE 390 JA 1/16W
R1887	401 105 0603	MT-GLAZE 10K JA 1/16W
R1888	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1889	401 105 0504	MT-GLAZE 1K JA 1/16W
R1891	401 105 0504	MT-GLAZE 1K JA 1/16W
R1892	401 105 0603	MT-GLAZE 10K JA 1/16W
R204	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R205	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R207	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2101	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2102	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2103	401 105 3901	MT-GLAZE 33 JA 1/16W
R2104	401 105 1907	MT-GLAZE 180 JA 1/16W
R2105	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R2106	401 105 0306	MT-GLAZE 10 JA 1/16W
R2107	401 105 3901	MT-GLAZE 33 JA 1/16W
R2108	401 105 1907	MT-GLAZE 180 JA 1/16W
R2109	401 105 0306	MT-GLAZE 10 JA 1/16W
R211	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2110	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R2111	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R2112	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R2113	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R2117	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2118	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2119	401 105 0405	MT-GLAZE 100 JA 1/16W
R212	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2121	401 105 0405	MT-GLAZE 100 JA 1/16W
R2123	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2124	401 105 8104	MT-GLAZE 56K JA 1/16W
R2125	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2126	401 105 5905	MT-GLAZE 560 JA 1/16W
R2128	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R213	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R2131	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R214	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R216	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2161	401 105 0405	MT-GLAZE 100 JA 1/16W
R2162	401 105 0405	MT-GLAZE 100 JA 1/16W
R217	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R218	401 105 0603	MT-GLAZE 10K JA 1/16W
R2181	401 105 0405	MT-GLAZE 100 JA 1/16W
R2182	401 105 0405	MT-GLAZE 100 JA 1/16W
R219	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R221	401 105 5103	MT-GLAZE 47 JA 1/16W
R222	401 105 0405	MT-GLAZE 100 JA 1/16W
R2501	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2502	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2506	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R2507	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2508	401 105 4700	MT-GLAZE 39K JA 1/16W
R2509	401 105 0504	MT-GLAZE 1K JA 1/16W
R251	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R2511	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2512	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2516	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R2517	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2518	401 105 4700	MT-GLAZE 39K JA 1/16W
R2519	401 105 0504	MT-GLAZE 1K JA 1/16W
R252	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R2521	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2522	401 148 6006	MT-GLAZE 2.2 JA 1/16W
R2526	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R2527	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2528	401 105 4700	MT-GLAZE 39K JA 1/16W
R2529	401 105 0504	MT-GLAZE 1K JA 1/16W
R253	401 105 0405	MT-GLAZE 100 JA 1/16W
R2533	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2534	401 105 4205	MT-GLAZE 33K JA 1/16W
R2536	401 105 0603	MT-GLAZE 10K JA 1/16W
R2537	401 105 0702	MT-GLAZE 100K JA 1/16W
R2538	401 105 0702	MT-GLAZE 100K JA 1/16W
R2539	401 105 0702	MT-GLAZE 100K JA 1/16W
R2541	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2542	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2543	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2544	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2545	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2546	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2547	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2548	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2549	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Key No.	Part No.	Description
R2550	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2551	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2552	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2553	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2554	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2555	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2556	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2557	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2558	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2559	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2560	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2561	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2562	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2571	401 105 0405	MT-GLAZE 100 JA 1/16W
R2572	401 105 0405	MT-GLAZE 100 JA 1/16W
R2576	401 105 0504	MT-GLAZE 1K JA 1/16W
R2577	401 105 0504	MT-GLAZE 1K JA 1/16W
R2581	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R2584	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2591	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
R2806	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2807	401 105 0405	MT-GLAZE 100 JA 1/16W
R2821	401 105 5202	MT-GLAZE 470 JA 1/16W
R2822	401 105 5202	MT-GLAZE 470 JA 1/16W
R2823	401 105 5202	MT-GLAZE 470 JA 1/16W
R2824	401 105 0603	MT-GLAZE 10K JA 1/16W
R2825	401 105 0603	MT-GLAZE 10K JA 1/16W
R2826	401 105 0603	MT-GLAZE 10K JA 1/16W
R2841	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2842	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2843	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2844	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2851	401 105 0504	MT-GLAZE 1K JA 1/16W
R2852	401 105 0504	MT-GLAZE 1K JA 1/16W
R2853	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R2854	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2856	401 105 0504	MT-GLAZE 1K JA 1/16W
R2857	401 105 0504	MT-GLAZE 1K JA 1/16W
R2858	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2861	401 105 0504	MT-GLAZE 1K JA 1/16W
R2862	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2866	401 105 4502	MT-GLAZE 390 JA 1/16W
R2867	401 105 4502	MT-GLAZE 390 JA 1/16W
R2868	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2877	401 105 2904	MT-GLAZE 22K JA 1/16W
R2881	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2882	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2883	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2884	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2887	401 105 0603	MT-GLAZE 10K JA 1/16W
R2889	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2891	401 105 0603	MT-GLAZE 10K JA 1/16W
R301	401 105 0603	MT-GLAZE 10K JA 1/16W
R302	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R306	401 105 0603	MT-GLAZE 10K JA 1/16W
R308	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3100	401 105 7305	MT-GLAZE 820 JA 1/16W
R3101	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R3102	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R3103	401 105 7305	MT-GLAZE 820 JA 1/16W
R3104	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R3105	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R3106	401 105 2904	MT-GLAZE 22K JA 1/16W
R3107	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R3108	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R3109	401 105 7305	MT-GLAZE 820 JA 1/16W
R3111	401 105 0504	MT-GLAZE 1K JA 1/16W
R3112	401 105 0504	MT-GLAZE 1K JA 1/16W
R3113	401 105 1907	MT-GLAZE 180 JA 1/16W
R3114	401 158 4108	MT-GLAZE 4.7 JA 1/16W
R3115	401 112 8005	MT-GLAZE 5.6 JA 1/16W
R312	401 105 0603	MT-GLAZE 10K JA 1/16W
R3121	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3122	401 105 3901	MT-GLAZE 33 JA 1/16W
R3123	401 105 0504	MT-GLAZE 1K JA 1/16W
R3126	401 105 1402	MT-GLAZE 150 JA 1/16W
R3127	401 105 1402	MT-GLAZE 150 JA 1/16W
R3131	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3132	401 105 3901	MT-GLAZE 33 JA 1/16W
R3133	401 105 0504	MT-GLAZE 1K JA 1/16W
R3136	401 105 1402	MT-GLAZE 150 JA 1/16W
R3137	401 105 1402	MT-GLAZE 150 JA 1/16W
R314	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3141	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3142	401 105 3901	MT-GLAZE 33 JA 1/16W
R3143	401 105 0504	MT-GLAZE 1K JA 1/16W
R3146	401 105 1402	MT-GLAZE 150 JA 1/16W
R3147	401 105 1402	MT-GLAZE 150 JA 1/16W
R316	401 105 0603	MT-GLAZE 10K JA 1/16W
R3163	401 105 0405	MT-GLAZE 100 JA 1/16W
R3164	401 105 0603	MT-GLAZE 10K JA 1/16W
R3165	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R3168	401 105 0504	MT-GLAZE 1K JA 1/16W
R3169	401 105 0504	MT-GLAZE 1K JA 1/16W
R317	401 105 0603	MT-GLAZE 10K JA 1/16W
R3171	401 105 0504	MT-GLAZE 1K JA 1/16W
R3172	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R3173	401 105 0504	MT-GLAZE 1K JA 1/16W
R3174	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R3176	401 105 0504	MT-GLAZE 1K JA 1/16W
R3177	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3181	401 105 0603	MT-GLAZE 10K JA 1/16W
R3182	401 105 0603	MT-GLAZE 10K JA 1/16W
R3184	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3185	401 105 0504	MT-GLAZE 1K JA 1/16W
R319	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R322	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R323	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R324	401 105 0603	MT-GLAZE 10K JA 1/16W
R328	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R329	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R331	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R332	401 105 2607	MT-GLAZE 22 JA 1/16W
R333	401 105 2607	MT-GLAZE 22 JA 1/16W
R334	401 105 2607	MT-GLAZE 22 JA 1/16W
R336	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R338	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R344	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R346	401 105 0603	MT-GLAZE 10K JA 1/16W
R348	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R349	401 105 0603	MT-GLAZE 10K JA 1/16W
R352	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3531	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3532	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3534	401 105 0306	MT-GLAZE 10 JA 1/16W
R3535	401 105 0306	MT-GLAZE 10 JA 1/16W
R3537	401 105 0306	MT-GLAZE 10 JA 1/16W
R3538	401 105 0306	MT-GLAZE 10 JA 1/16W
R3539	401 105 0306	MT-GLAZE 10 JA 1/16W
R354	401 105 0603	MT-GLAZE 10K JA 1/16W
R3540	401 105 0306	MT-GLAZE 10 JA 1/16W
R3541	401 105 0306	MT-GLAZE 10 JA 1/16W
R3543	401 105 0306	MT-GLAZE 10 JA 1/16W
R3544	401 105 0306	MT-GLAZE 10 JA 1/16W

Electrical Parts List

Key No.	Part No.	Description
R3545	401 105 0306	MT-GLAZE 10 JA 1/16W
R3546	401 105 0306	MT-GLAZE 10 JA 1/16W
R3547	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3552	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R3553	401 105 0504	MT-GLAZE 1K JA 1/16W
R3556	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3558	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R356	401 105 0603	MT-GLAZE 10K JA 1/16W
R3561	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3562	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3563	401 105 0306	MT-GLAZE 10 JA 1/16W
R3564	401 105 0306	MT-GLAZE 10 JA 1/16W
R3565	401 105 0306	MT-GLAZE 10 JA 1/16W
R3567	401 105 0306	MT-GLAZE 10 JA 1/16W
R3568	401 105 0306	MT-GLAZE 10 JA 1/16W
R3569	401 105 0306	MT-GLAZE 10 JA 1/16W
R3570	401 105 0306	MT-GLAZE 10 JA 1/16W
R3571	401 105 0306	MT-GLAZE 10 JA 1/16W
R3573	401 105 0306	MT-GLAZE 10 JA 1/16W
R3574	401 105 0306	MT-GLAZE 10 JA 1/16W
R3575	401 105 0306	MT-GLAZE 10 JA 1/16W
R3576	401 105 0306	MT-GLAZE 10 JA 1/16W
R3577	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R358	401 105 0603	MT-GLAZE 10K JA 1/16W
R3581	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R3582	401 105 0504	MT-GLAZE 1K JA 1/16W
R359	401 105 0603	MT-GLAZE 10K JA 1/16W
R3591	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3592	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R3593	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R3594	401 105 0603	MT-GLAZE 10K JA 1/16W
R361	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R362	401 105 0603	MT-GLAZE 10K JA 1/16W
R364	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R366	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R368	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R371	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3801	401 105 0405	MT-GLAZE 100 JA 1/16W
R3802	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3803	401 105 0603	MT-GLAZE 10K JA 1/16W
R3804	401 105 0405	MT-GLAZE 100 JA 1/16W
R3806	401 105 0405	MT-GLAZE 100 JA 1/16W
R381	401 105 0603	MT-GLAZE 10K JA 1/16W
R3821	401 105 0603	MT-GLAZE 10K JA 1/16W
R3822	401 105 4205	MT-GLAZE 33K JA 1/16W
R3823	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R383	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3831	401 105 0405	MT-GLAZE 100 JA 1/16W
R3832	401 105 0405	MT-GLAZE 100 JA 1/16W
R3835	401 105 0504	MT-GLAZE 1K JA 1/16W
R384	401 105 0603	MT-GLAZE 10K JA 1/16W
R3841	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3842	401 105 0603	MT-GLAZE 10K JA 1/16W
R3843	401 105 0603	MT-GLAZE 10K JA 1/16W
R3844	401 105 0405	MT-GLAZE 100 JA 1/16W
R3846	401 105 0603	MT-GLAZE 10K JA 1/16W
R3847	401 105 0603	MT-GLAZE 10K JA 1/16W
R3848	401 105 0603	MT-GLAZE 10K JA 1/16W
R387	401 105 0603	MT-GLAZE 10K JA 1/16W
R388	401 105 0603	MT-GLAZE 10K JA 1/16W
R391	401 105 0603	MT-GLAZE 10K JA 1/16W
R392	401 105 0603	MT-GLAZE 10K JA 1/16W
R393	401 105 0603	MT-GLAZE 10K JA 1/16W
R394	401 105 0603	MT-GLAZE 10K JA 1/16W
R4103	401 105 5202	MT-GLAZE 470 JA 1/16W
R4104	401 217 5404	MT-GLAZE 47K FA 1/16W
R4106	401 105 8104	MT-GLAZE 56K JA 1/16W
R4107	401 105 8104	MT-GLAZE 56K JA 1/16W
R4108	401 105 0405	MT-GLAZE 100 JA 1/16W
R4109	401 105 0405	MT-GLAZE 100 JA 1/16W
R411	401 105 2607	MT-GLAZE 22 JA 1/16W
R4111	401 105 0405	MT-GLAZE 100 JA 1/16W
R4112	401 105 0603	MT-GLAZE 10K JA 1/16W
R4113	401 105 0603	MT-GLAZE 10K JA 1/16W
R4114	401 105 0603	MT-GLAZE 10K JA 1/16W
R4116	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R4117	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R4118	401 114 0908	MT-GLAZE 3.3M JA 1/16W
R4119	401 105 0603	MT-GLAZE 10K JA 1/16W
R412	401 105 2607	MT-GLAZE 22 JA 1/16W
R4121	401 105 0603	MT-GLAZE 10K JA 1/16W
R4123	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4124	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4127	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4128	401 105 0405	MT-GLAZE 100 JA 1/16W
R4129	401 105 0405	MT-GLAZE 100 JA 1/16W
R413	401 105 2607	MT-GLAZE 22 JA 1/16W
R4131	401 105 0405	MT-GLAZE 100 JA 1/16W
R4133	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4134	401 105 0405	MT-GLAZE 100 JA 1/16W
R4136	401 105 0405	MT-GLAZE 100 JA 1/16W
R4137	401 105 0405	MT-GLAZE 100 JA 1/16W
R4138	401 105 0405	MT-GLAZE 100 JA 1/16W
R4139	401 217 4100	MT-GLAZE 22K FA 1/16W
R414	401 105 2607	MT-GLAZE 22 JA 1/16W
R415	401 105 2607	MT-GLAZE 22 JA 1/16W
R416	401 105 2607	MT-GLAZE 22 JA 1/16W
R4174	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4176	401 105 0405	MT-GLAZE 100 JA 1/16W
R4177	401 105 0504	MT-GLAZE 1K JA 1/16W
R4178	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R4179	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R4181	401 105 0405	MT-GLAZE 100 JA 1/16W
R4182	401 105 3000	MT-GLAZE 220K JA 1/16W
R4183	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4196	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4198	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4199	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R420	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R422	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R423	401 105 3901	MT-GLAZE 33 JA 1/16W
R424	401 105 3901	MT-GLAZE 33 JA 1/16W
R426	401 105 3901	MT-GLAZE 33 JA 1/16W
R427	401 105 3901	MT-GLAZE 33 JA 1/16W
R428	401 105 3901	MT-GLAZE 33 JA 1/16W
R429	401 105 3901	MT-GLAZE 33 JA 1/16W
R431	401 105 3901	MT-GLAZE 33 JA 1/16W
R432	401 105 3901	MT-GLAZE 33 JA 1/16W
R433	401 105 3901	MT-GLAZE 33 JA 1/16W
R434	401 105 3901	MT-GLAZE 33 JA 1/16W
R436	401 105 3901	MT-GLAZE 33 JA 1/16W
R437	401 105 3901	MT-GLAZE 33 JA 1/16W
R438	401 105 3901	MT-GLAZE 33 JA 1/16W
R439	401 105 3901	MT-GLAZE 33 JA 1/16W
R441	401 105 3901	MT-GLAZE 33 JA 1/16W
R442	401 105 3901	MT-GLAZE 33 JA 1/16W
R443	401 105 3901	MT-GLAZE 33 JA 1/16W
R444	401 105 3901	MT-GLAZE 33 JA 1/16W
R446	401 105 3901	MT-GLAZE 33 JA 1/16W
R447	401 105 3901	MT-GLAZE 33 JA 1/16W
R448	401 105 3901	MT-GLAZE 33 JA 1/16W
R449	401 105 3901	MT-GLAZE 33 JA 1/16W
R451	401 105 3901	MT-GLAZE 33 JA 1/16W
R457	401 105 3901	MT-GLAZE 33 JA 1/16W

Key No.	Part No.	Description
R458	401 105 3901	MT-GLAZE 33 JA 1/16W
R459	401 105 3901	MT-GLAZE 33 JA 1/16W
R461	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R462	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R463	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R464	401 105 0603	MT-GLAZE 10K JA 1/16W
R466	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R467	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R468	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R469	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R471	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R472	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R473	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R504	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R507	401 105 0504	MT-GLAZE 1K JA 1/16W
R5201	401 105 0405	MT-GLAZE 100 JA 1/16W
R5202	401 105 0405	MT-GLAZE 100 JA 1/16W
R5203	401 105 0405	MT-GLAZE 100 JA 1/16W
R521	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R5211	401 105 0306	MT-GLAZE 10 JA 1/16W
R5212	401 105 0306	MT-GLAZE 10 JA 1/16W
R5213	401 105 0306	MT-GLAZE 10 JA 1/16W
R5214	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5215	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5216	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5217	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5218	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5219	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R5221	401 113 4402	MT-GLAZE 75 JA 1/16W
R5222	401 105 0900	MT-GLAZE 120 JA 1/16W
R5223	401 113 4402	MT-GLAZE 75 JA 1/16W
R5224	401 105 0900	MT-GLAZE 120 JA 1/16W
R5225	401 113 4402	MT-GLAZE 75 JA 1/16W
R5226	401 105 0900	MT-GLAZE 120 JA 1/16W
R523	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R5231	401 105 0405	MT-GLAZE 100 JA 1/16W
R5232	401 105 0603	MT-GLAZE 10K JA 1/16W
R5233	401 105 0405	MT-GLAZE 100 JA 1/16W
R5234	401 105 0603	MT-GLAZE 10K JA 1/16W
R5235	401 105 0405	MT-GLAZE 100 JA 1/16W
R5236	401 105 0603	MT-GLAZE 10K JA 1/16W
R524	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R5241	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5243	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5245	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5248	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5251	401 105 0504	MT-GLAZE 1K JA 1/16W
R5252	401 105 0504	MT-GLAZE 1K JA 1/16W
R5253	401 105 0504	MT-GLAZE 1K JA 1/16W
R5254	401 105 0504	MT-GLAZE 1K JA 1/16W
R5255	401 105 0504	MT-GLAZE 1K JA 1/16W
R5256	401 105 0504	MT-GLAZE 1K JA 1/16W
R5257	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5258	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5259	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5261	401 105 0405	MT-GLAZE 100 JA 1/16W
R5262	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5271	401 105 1402	MT-GLAZE 150 JA 1/16W
R5274	401 105 3901	MT-GLAZE 33 JA 1/16W
R5276	401 105 0504	MT-GLAZE 1K JA 1/16W
R5277	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R5278	401 105 5103	MT-GLAZE 47 JA 1/16W
R5281	401 105 1402	MT-GLAZE 150 JA 1/16W
R5284	401 105 3901	MT-GLAZE 33 JA 1/16W
R5286	401 105 0504	MT-GLAZE 1K JA 1/16W
R5287	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R5288	401 105 5103	MT-GLAZE 47 JA 1/16W
R5291	401 105 1402	MT-GLAZE 150 JA 1/16W
R5294	401 105 3901	MT-GLAZE 33 JA 1/16W
R5296	401 105 0504	MT-GLAZE 1K JA 1/16W
R5297	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R5298	401 105 5103	MT-GLAZE 47 JA 1/16W
R534	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R537	401 105 0504	MT-GLAZE 1K JA 1/16W
R551	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R553	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R554	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R564	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R567	401 105 0504	MT-GLAZE 1K JA 1/16W
R581	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R583	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R584	401 105 7404	MT-GLAZE 8.2K JA 1/16W
R6102	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6104	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6106	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6122	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6123	401 105 0405	MT-GLAZE 100 JA 1/16W
R6126	401 105 0702	MT-GLAZE 100K JA 1/16W
R6127	401 105 0702	MT-GLAZE 100K JA 1/16W
R6128	401 105 0702	MT-GLAZE 100K JA 1/16W
R6129	401 105 2102	MT-GLAZE 18K JA 1/16W
R6130	401 105 1600	MT-GLAZE 15K JA 1/16W
R6131	401 105 1105	MT-GLAZE 12K JA 1/16W
R6133	401 105 0405	MT-GLAZE 100 JA 1/16W
R6136	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6137	401 105 0603	MT-GLAZE 10K JA 1/16W
R6138	401 105 0504	MT-GLAZE 1K JA 1/16W
R6142	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6143	401 105 0405	MT-GLAZE 100 JA 1/16W
R6148	401 105 0405	MT-GLAZE 100 JA 1/16W
R6149	401 105 1105	MT-GLAZE 12K JA 1/16W
R6151	401 105 1105	MT-GLAZE 12K JA 1/16W
R6153	401 105 0405	MT-GLAZE 100 JA 1/16W
R6156	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6157	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6211	401 105 0504	MT-GLAZE 1K JA 1/16W
R6216	401 203 9805	MT-GLAZE 2.7K FA 1/16W
R6217	401 203 9805	MT-GLAZE 2.7K FA 1/16W
R6218	401 105 0405	MT-GLAZE 100 JA 1/16W
R6221	401 105 0504	MT-GLAZE 1K JA 1/16W
R6226	401 203 9805	MT-GLAZE 2.7K FA 1/16W
R6227	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R6228	401 105 0405	MT-GLAZE 100 JA 1/16W
R6231	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6232	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6237	401 105 0405	MT-GLAZE 100 JA 1/16W
R6241	401 105 8005	MT-GLAZE 1M JA 1/16W
R6242	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R6243	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6244	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6251	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6252	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6253	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6254	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6271	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6272	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6273	401 105 5103	MT-GLAZE 47 JA 1/16W
R6274	401 105 5103	MT-GLAZE 47 JA 1/16W
R6281	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6283	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
⚠ R6601	402 083 5109	FUSIBLE RES 5.6 JH 1/4W
⚠ R6606	402 080 7007	FUSIBLE RES 1.8 JH 1/4W
⚠ R6607	402 080 7007	FUSIBLE RES 1.8 JH 1/4W
R6616	645 030 1056	PROTECTOR,IC 3.8A 72V

Key No.	Part No.	Description
R6619	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6622	401 198 7701	MT-GLAZE 33 JA 1W
R6623	401 198 7701	MT-GLAZE 33 JA 1W
R6624	401 198 7701	MT-GLAZE 33 JA 1W
R6652	401 235 6209	MT-GLAZE 2.7 JA 1W
R6661	401 105 0405	MT-GLAZE 100 JA 1/16W
R6671	401 105 0405	MT-GLAZE 100 JA 1/16W
R6672	401 235 6209	MT-GLAZE 2.7 JA 1W
R801	401 105 0405	MT-GLAZE 100 JA 1/16W
R802	401 105 0405	MT-GLAZE 100 JA 1/16W
R803	401 105 0405	MT-GLAZE 100 JA 1/16W
R804	401 105 0405	MT-GLAZE 100 JA 1/16W
R806	401 105 0603	MT-GLAZE 10K JA 1/16W
R807	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R808	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R811	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R812	401 105 0603	MT-GLAZE 10K JA 1/16W
R8121	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R8122	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R8126	401 105 0603	MT-GLAZE 10K JA 1/16W
R8127	401 105 0405	MT-GLAZE 100 JA 1/16W
R8128	401 105 0603	MT-GLAZE 10K JA 1/16W
R8129	401 105 0603	MT-GLAZE 10K JA 1/16W
R8131	401 105 0405	MT-GLAZE 100 JA 1/16W
R8132	401 105 0405	MT-GLAZE 100 JA 1/16W
R814	401 105 0603	MT-GLAZE 10K JA 1/16W
R8141	401 105 0603	MT-GLAZE 10K JA 1/16W
R8143	401 105 0603	MT-GLAZE 10K JA 1/16W
R816	401 105 0603	MT-GLAZE 10K JA 1/16W
R818	401 105 0405	MT-GLAZE 100 JA 1/16W
R819	401 105 0603	MT-GLAZE 10K JA 1/16W
R821	401 105 0405	MT-GLAZE 100 JA 1/16W
R822	401 105 0405	MT-GLAZE 100 JA 1/16W
R823	401 105 0603	MT-GLAZE 10K JA 1/16W
R826	401 105 0603	MT-GLAZE 10K JA 1/16W
R827	401 105 0603	MT-GLAZE 10K JA 1/16W
R828	401 105 0405	MT-GLAZE 100 JA 1/16W
R831	401 105 0405	MT-GLAZE 100 JA 1/16W
R832	401 105 0405	MT-GLAZE 100 JA 1/16W
R834	401 105 0603	MT-GLAZE 10K JA 1/16W
R836	401 105 0603	MT-GLAZE 10K JA 1/16W
R841	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R842	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R846	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R847	401 105 0603	MT-GLAZE 10K JA 1/16W
R848	401 105 0603	MT-GLAZE 10K JA 1/16W
R851	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R856	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R857	401 105 0603	MT-GLAZE 10K JA 1/16W
R858	401 105 0603	MT-GLAZE 10K JA 1/16W
R861	401 105 0405	MT-GLAZE 100 JA 1/16W
R862	401 105 0405	MT-GLAZE 100 JA 1/16W
R866	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R867	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R868	401 105 0603	MT-GLAZE 10K JA 1/16W
R871	401 105 0603	MT-GLAZE 10K JA 1/16W
R872	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R873	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R874	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R876	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R877	401 105 0405	MT-GLAZE 100 JA 1/16W
R878	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R879	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R881	401 105 0603	MT-GLAZE 10K JA 1/16W
R882	401 105 0405	MT-GLAZE 100 JA 1/16W
R883	401 105 0405	MT-GLAZE 100 JA 1/16W
R884	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R886	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R887	401 105 0405	MT-GLAZE 100 JA 1/16W
R888	401 105 0603	MT-GLAZE 10K JA 1/16W
R889	401 105 0405	MT-GLAZE 100 JA 1/16W
R891	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R892	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R893	401 105 0405	MT-GLAZE 100 JA 1/16W
R894	401 105 0405	MT-GLAZE 100 JA 1/16W
R896	401 105 0405	MT-GLAZE 100 JA 1/16W
R897	401 105 0603	MT-GLAZE 10K JA 1/16W
R899	401 105 0603	MT-GLAZE 10K JA 1/16W
R9801	401 105 5400	MT-GLAZE 47K JA 1/16W
R9803	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R9806	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9807	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9811	401 105 8005	MT-GLAZE 1M JA 1/16W
R9812	401 105 0405	MT-GLAZE 100 JA 1/16W
R9813	401 105 0405	MT-GLAZE 100 JA 1/16W
R9814	401 105 0405	MT-GLAZE 100 JA 1/16W
R9816	401 105 0405	MT-GLAZE 100 JA 1/16W
R9822	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
TRANSFORMER		
T111	645 044 3626	FILTER,LP 7MHZ
T151	645 044 3626	FILTER,LP 7MHZ
T171	645 044 3626	FILTER,LP 7MHZ
COIL		
L1101	645 004 1990	INDUCTOR,47U K
L1102	645 001 4512	INDUCTOR,10U K
L1103	645 024 8665	INDUCTOR,4.7U M
L1161	645 021 1799	INDUCTOR,82U J
L151	645 026 1008	INDUCTOR,3.3U M
L1581	645 026 1008	INDUCTOR,3.3U M
L1831	645 026 1008	INDUCTOR,3.3U M
L201	645 026 0988	INDUCTOR,2.2U M
L202	645 026 0988	INDUCTOR,2.2U M
L203	645 026 0988	INDUCTOR,2.2U M
L2101	645 024 8641	INDUCTOR,33U K
L2102	645 001 4512	INDUCTOR,10U K
L2103	645 024 8641	INDUCTOR,33U K
L2161	645 026 1008	INDUCTOR,3.3U M
L2571	645 026 1008	INDUCTOR,3.3U M
L2591	645 020 1776	INDUCTOR,3.3U M
L3531	645 020 1776	INDUCTOR,3.3U M
L3561	645 020 1776	INDUCTOR,3.3U M
L3591	401 035 4306	MT-GLAZE 10 JA 1/8W
L501	645 020 1776	INDUCTOR,3.3U M
L502	645 020 1776	INDUCTOR,3.3U M
L5201	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L5202	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L531	645 020 1776	INDUCTOR,3.3U M
L532	645 020 1776	INDUCTOR,3.3U M
L561	645 020 1776	INDUCTOR,3.3U M
L562	645 020 1776	INDUCTOR,3.3U M
L6601	645 020 1776	INDUCTOR,3.3U M
L9811	645 021 1645	INDUCTOR,2.2U J
DIODE		
D1171	407 149 0807	DIODE 1SS355-TE-17
D1891	407 149 0807	DIODE 1SS355-TE-17
D2806	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2807	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D2821	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2822	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2823	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2841	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2842	407 187 8209	ZENER DIODE UDZ12B-TE-17

Key No.	Part No.	Description
D2843	407 187 8209	ZENER DIODE UDZ12B-TE-17
D2844	407 187 8209	ZENER DIODE UDZ12B-TE-17
D3111	407 149 0807	DIODE 1SS355-TE-17
D3112	407 149 0807	DIODE 1SS355-TE-17
D3161	407 149 0807	DIODE 1SS355-TE-17
D3171	407 149 0807	DIODE 1SS355-TE-17
D3591	407 149 0807	DIODE 1SS355-TE-17
D3801	407 149 0807	DIODE 1SS355-TE-17
D3802	407 149 0807	DIODE 1SS355-TE-17
D3821	407 179 1706	ZENER DIODE UDZ5.1B-TE-17
D3831	407 149 0807	DIODE 1SS355-TE-17
D6126	407 149 0807	DIODE 1SS355-TE-17
D6127	407 149 0807	DIODE 1SS355-TE-17
D6131	407 149 0807	DIODE 1SS355-TE-17
D6132	407 149 0807	DIODE 1SS355-TE-17
D6146	407 149 0807	DIODE 1SS355-TE-17
D6151	407 149 0807	DIODE 1SS355-TE-17
D6211	407 149 0807	DIODE 1SS355-TE-17
D6212	407 149 0807	DIODE 1SS355-TE-17
D6213	407 149 0807	DIODE 1SS355-TE-17
D6214	407 149 0807	DIODE 1SS355-TE-17
D6223	407 149 0807	DIODE 1SS355-TE-17
D6224	407 149 0807	DIODE 1SS355-TE-17
D6602	407 149 0807	DIODE 1SS355-TE-17
D6606	407 149 0807	DIODE 1SS355-TE-17
D6611	407 149 0807	DIODE 1SS355-TE-17
D6621	407 149 0807	DIODE 1SS355-TE-17
D6631	407 149 0807	DIODE 1SS355-TE-17
D6641	407 149 0807	DIODE 1SS355-TE-17
D6642	407 149 0807	DIODE 1SS355-TE-17
D6661	407 149 0807	DIODE 1SS355-TE-17
D6662	407 149 0807	DIODE 1SS355-TE-17
D801	407 149 0807	DIODE 1SS355-TE-17
D802	407 149 0807	DIODE 1SS355-TE-17
D8122	407 149 0807	DIODE 1SS355-TE-17
D8126	407 201 2701	DIODE RB051L-40-TE25
D856	407 149 0807	DIODE 1SS355-TE-17
D857	407 149 0807	DIODE 1SS355-TE-17

MISCELLANEOUS

Key No.	Part No.	Description
X1101	645 047 1568	OSC,CRYSTAL 16.200MHZ
X1351	645 047 6587	OSC,CRYSTAL 26.000MHZ
X1361	645 047 6846	OSC,CRYSTAL 24.000MHZ
X3821	645 021 1218	OSC,CERAMIC 8.00MHZ
	645 037 5187	OSC,CERAMIC 8.00MHZ
X3841	645 021 1218	OSC,CERAMIC 8.00MHZ
	645 037 5187	OSC,CERAMIC 8.00MHZ
X851	645 030 5436	OSC,CRYSTAL 12.288MHZ
X9811	645 035 8906	OSC,CRYSTAL 48MHZ

TEMP BOARD

610 297 1873 ASSY,PWB,TEMP ME8A 1AA0B10C3710B

INTEGRATED CIRCUIT

Key No.	Part No.	Description
IC4881	409 481 8602	IC LM76CHMX-5
CAPACITOR		
C4881	403 205 7803	TA-SOLID 2.2U M 16V
C4882	403 164 0204	CERAMIC 0.1U Z 25V
C4883	403 157 3809	CERAMIC 120P J 50V
C4884	403 155 1609	CERAMIC 33P J 50V

RESISTOR

Key No.	Part No.	Description
R4881	401 105 0306	MT-GLAZE 10 JA 1/16W
R4882	401 105 0306	MT-GLAZE 10 JA 1/16W
R4884	401 105 0603	MT-GLAZE 10K JA 1/16W

ACCESSORIES

Key No.	Part No.	Description
	645 054 3111	CABLE,MOUSE PS/2
	645 054 3128	CABLE,MOUSE PS/2
	645 039 7202	CABLE,MOUSE PS/2
	645 050 7861	ASSY,REMOCON CXKP
	610 283 4918	RC-BATTERY LID-CXFK
	610 297 6823	OWNER'S MANUAL-ME8E
	610 298 7041	CARRY BAG-MD8A
	645 030 6624	CABLE,INTERFACE VGA
⚠ AC CORD	645 054 1162	CORD,POWER-3.0MK

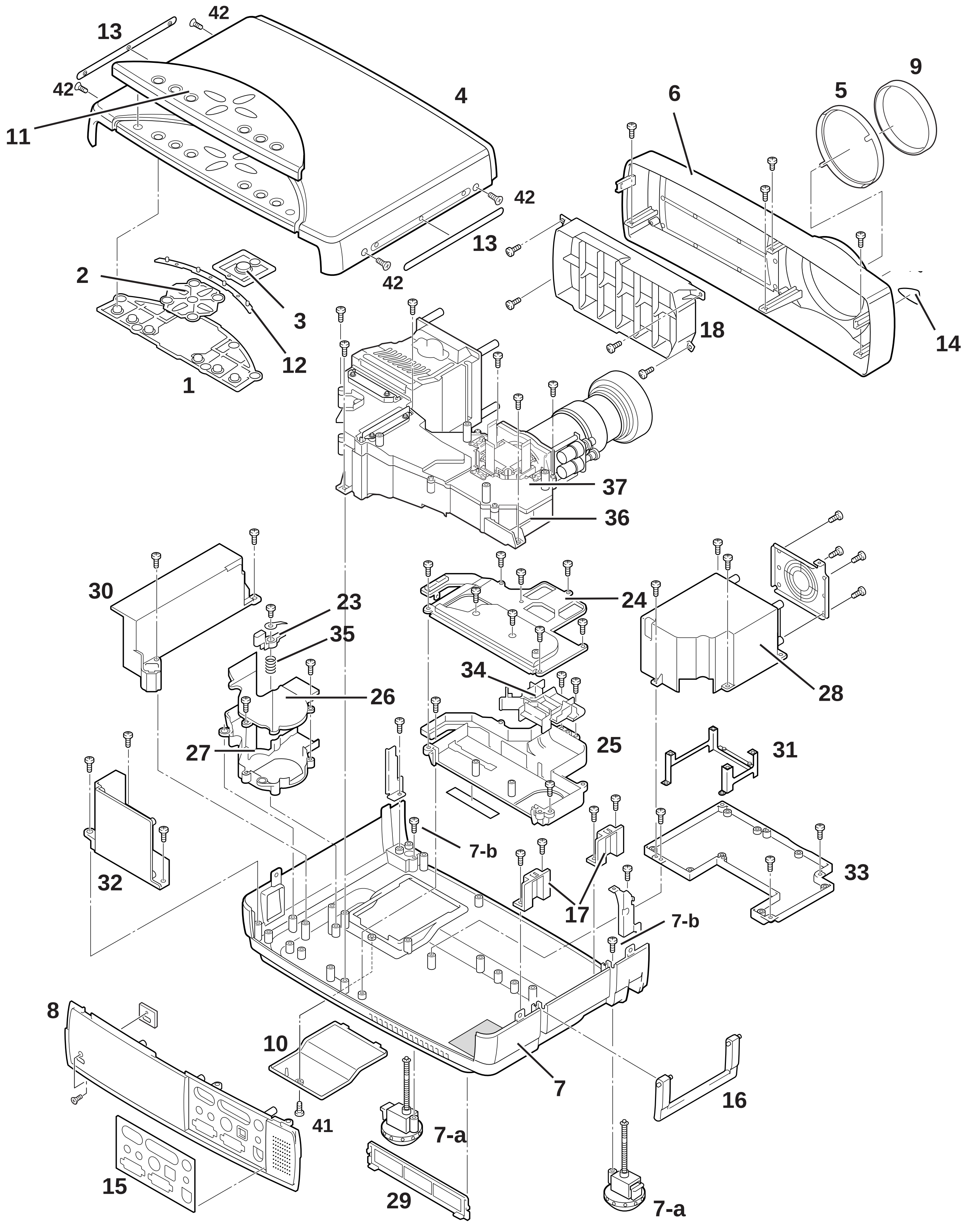
Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description

■ Mechanical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

● CABINET PARTS

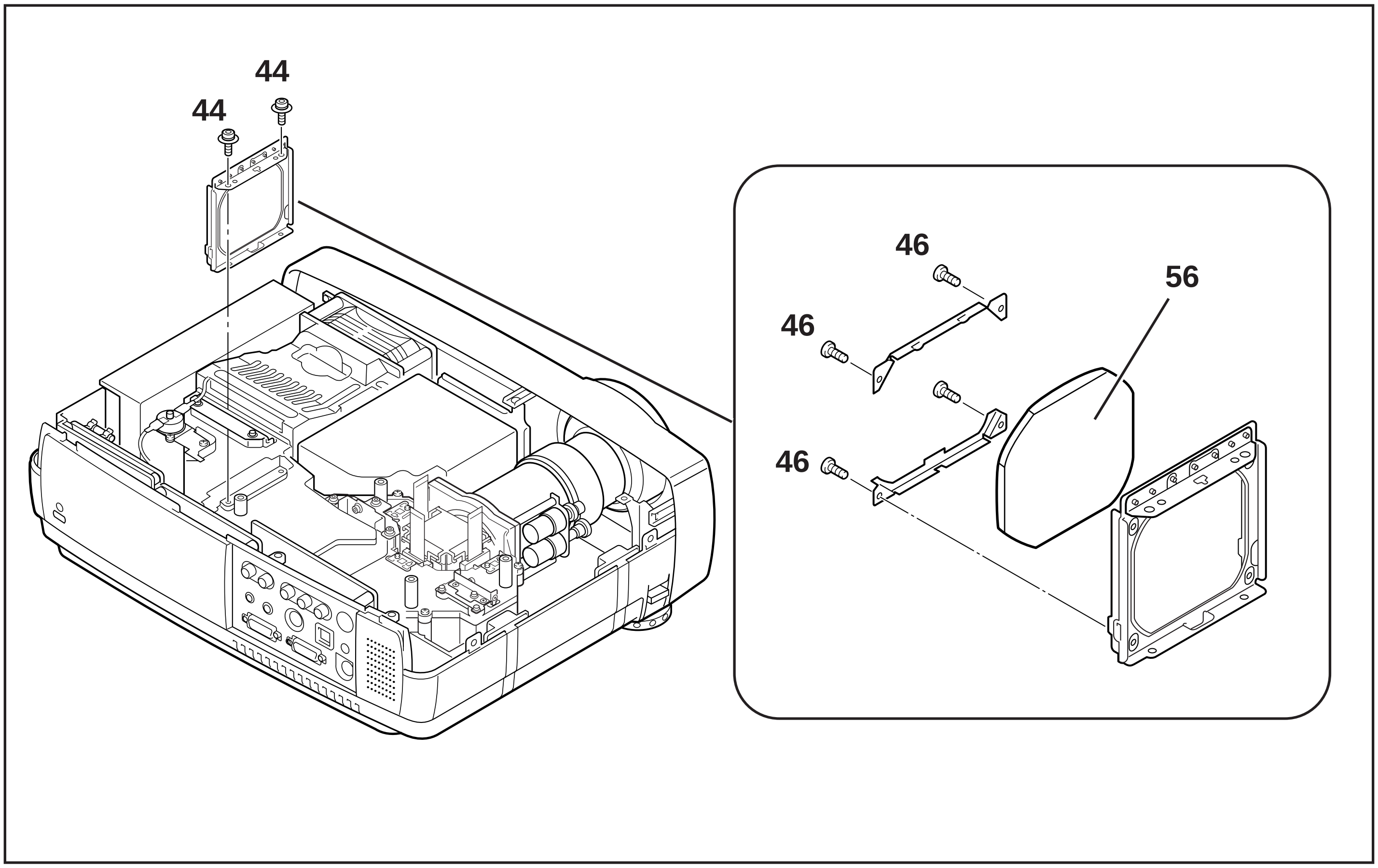


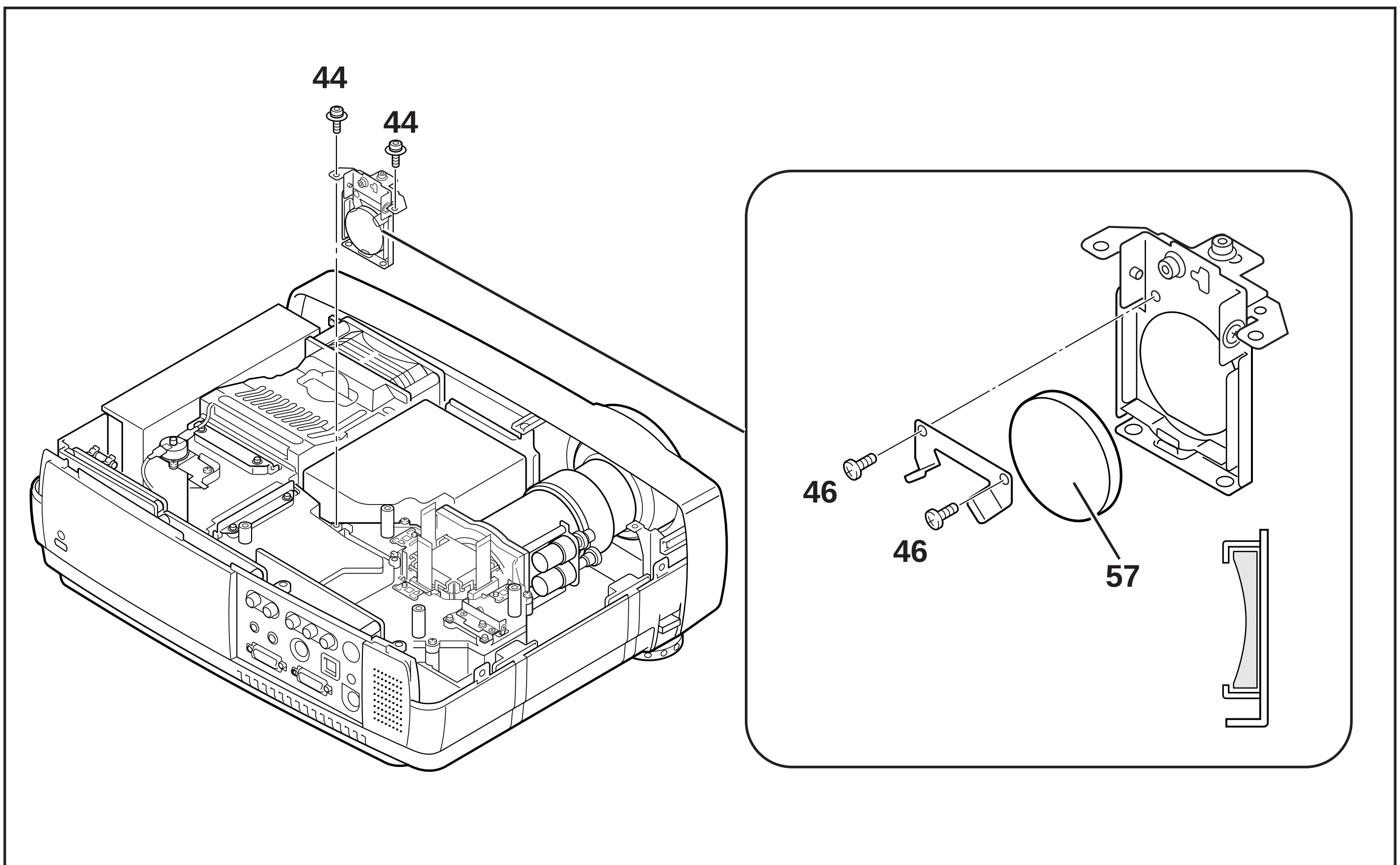
Mechanical Parts List

Key No.	Part No.	Description
CABINET PARTS		
1	610 292 6972	BUTTON CONTROL-MS6B
2	610 292 6996	BUTTON ZOOM-MS6B
3	610 292 5654	BUTTON POWER-MS6A
4	610 292 7061	CABINET TOP-MS6L
5	610 297 2344	CABINET RING-MD8A
6	610 301 3701	CABINET FRONT SERVICE-MD8E
7	610 296 6756	COMPL,CABINET BOTTOM-MS6L
	(Including Key No. 7-a and b)	
7-a	411 025 6500	SCR S-TPG BIN 3X8
7-b	610 292 6941	ASSY,STAND LEG-MS6B
8	610 297 2467	CABINET BACK-MD8E
9	610 297 2481	CAP LNS-MD8A
10	610 292 7245	COVER LMP-MS6L
11	610 292 7283	COVER CABI TOP-MS6L
12	610 292 7306	DEC LED-MS6A
13	610 294 1548	DEC SASH-MS6A
14	610 294 9308	DEC SHEET RC-MW6A
15	610 297 2597	DEC AV SHEET-MD8B
16	610 292 7399	HANDLE-MS6L
17	610 292 5753	HOLDER HANDLE-MS6A
18	610 297 2665	MOUNTING DUCT FR-MD8A
CHASSIS PARTS		
23	610 294 1760	ARM SW-MS6A
24	610 292 6040	COVER DUCT TOP-MS6A
25	610 292 6064	COVER DUCT BTM-MS6A
26	610 292 6088	COVER DUCT LMP PWB TOP-MS
27	610 292 6095	COVER DUCT LMP PWB BTM-MS
28	610 292 6101	COVER MAIN POW-MS6A
29	610 292 6125	FILTER BASE A-MS6A
30	610 292 6217	HOLDER LMP PWB-MS6A
31	610 294 5249	HOLDER POWER PCB A-MS6A
32	610 292 5760	MOUNTING SW-MS6A
33	610 292 6408	MOUNTING MAIN POWER-MS6A
34	610 297 3150	MOUNTING DUCT-MD8A
35	610 294 4501	SPRING INT LOCK-MS6A
36	610 292 6590	OPTICAL BASE BTM-MS6A
37	610 292 6606	OPTICAL BASE TOP-MS6A
SCREWS-CABINET-		
41	411 001 8801	SCR BIN 3X6
42	411 052 9109	SCR OVL 3X6
43	412 058 5409	SPECIAL SCREW
44	411 174 9308	BOLT HEX-SCT+SW+W 2.5X6
45	411 037 4105	SSCR PAN+W 3X10
46	411 002 4901	SCR PAN 2X4

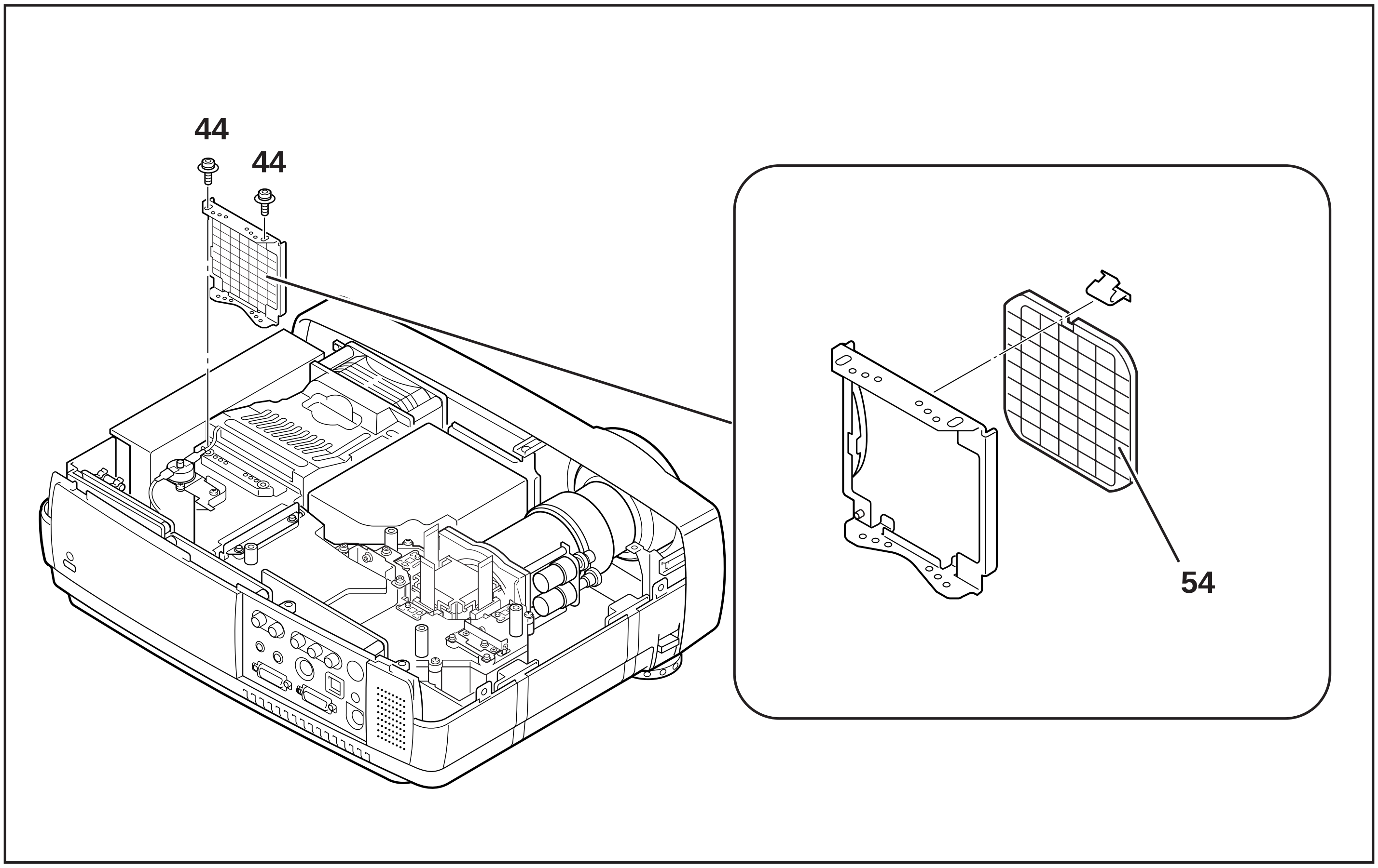
Key No.	Part No.	Description
OPTICAL PARTS		
51	645 046 8483	ASSY,PRISM(PBS)
or	645 049 7896	PRISM(PBS)
52	645 051 1288	ASSY,LENS,PROJECTION
	(Including Key No. 52-a)	
52-a	645 051 7525	MOTOR,LENS
53	610 296 7180	ASSY,LCD PNL/PRISM-MT6A
	(Including Key No. 53-a, b and c)	
53-a	645 048 1161	POLARIZED GLASS(OUT/R)
53-b	645 048 1178	POLARIZED GLASS(OUT/G)
53-c	645 048 1185	POLARIZED GLASS(OUT/B)
54	645 051 8898	LENS,INTEGRATOR(IN)
or	645 051 7600	LENS,INTEGRATOR(IN)
or	645 046 8049	LENS,INTEGRATOR(IN)
55	645 046 8056	LENS,INTEGRATOR(OUT)
56	645 046 8087	LENS,CONDENSER(IN)
or	645 051 1318	LENS,CONDENSER(IN)
57	645 046 8094	LENS,CONDENSER(OUT)
or	645 051 1325	LENS,CONDENSER(OUT)
58	645 046 8100	LENS,CONDENSER
or	645 051 1332	LENS,CONDENSER
59	645 046 8117	LENS,CONDENSER (R)
or	645 051 1349	LENS,CONDENSER (R)
60	645 046 8124	LENS,RELAY(IN)
or	645 051 1356	LENS,RELAY(IN)
61	645 046 8131	LENS,RELAY(OUT)
or	645 051 1363	LENS,RELAY(OUT)
62	645 050 2040	LENS,CONDENSER (B)
63	645 047 1797	MIRROR(W-COLD)
64	645 047 1803	MIRROR(B)
65	645 047 1810	MIRROR(R)
66	645 046 8513	OPTICAL FILTER(UV CUT)
67	645 048 1130	POLARIZED GLASS(IN/R)
68	645 048 1147	POLARIZED GLASS(IN/G)
69	645 048 1154	POLARIZED GLASS(IN/B)
70	645 047 1933	DICHROIC MIRROR (B)
71	645 047 1940	DICHROIC MIRROR (G)

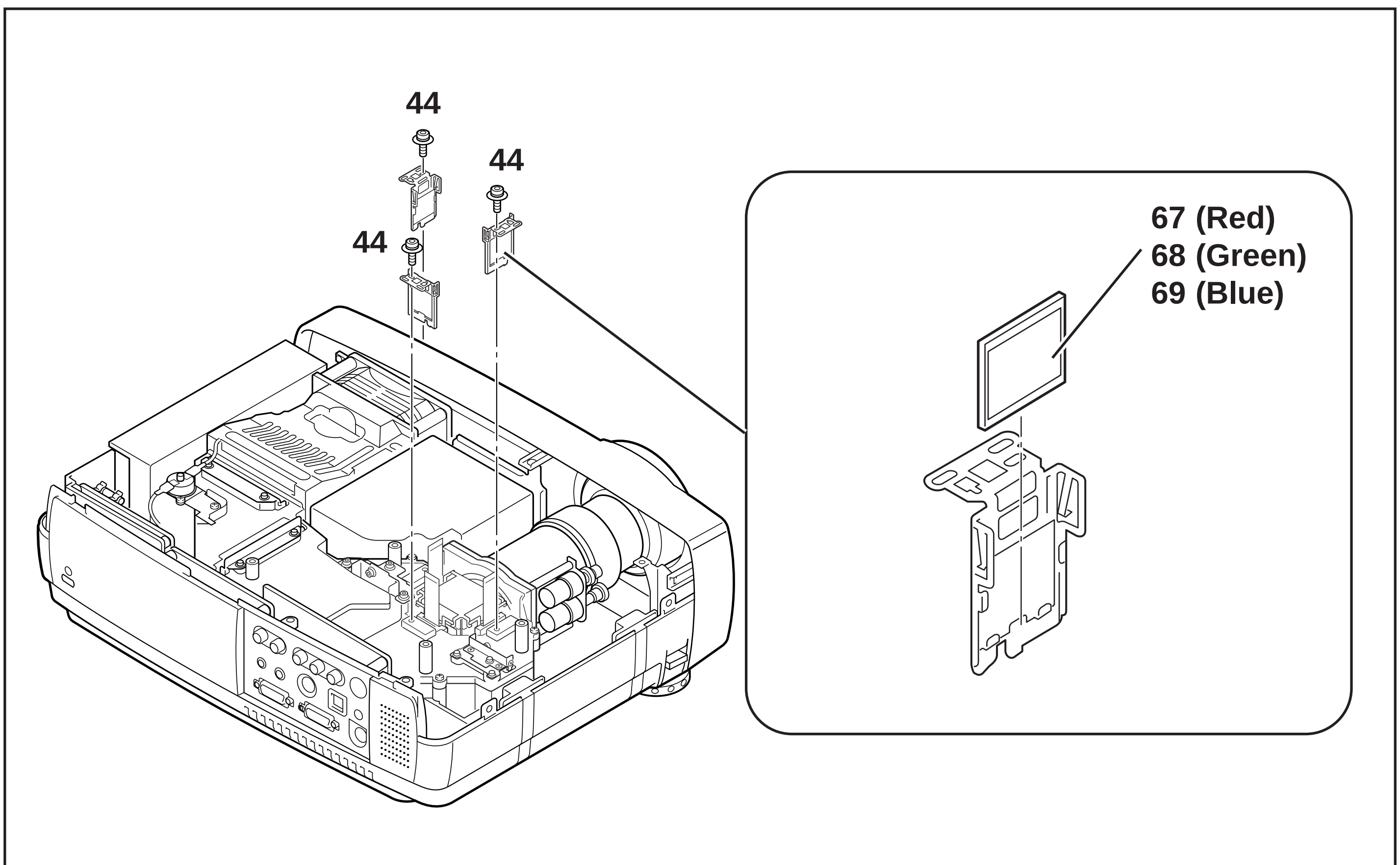
■ Optical Parts List



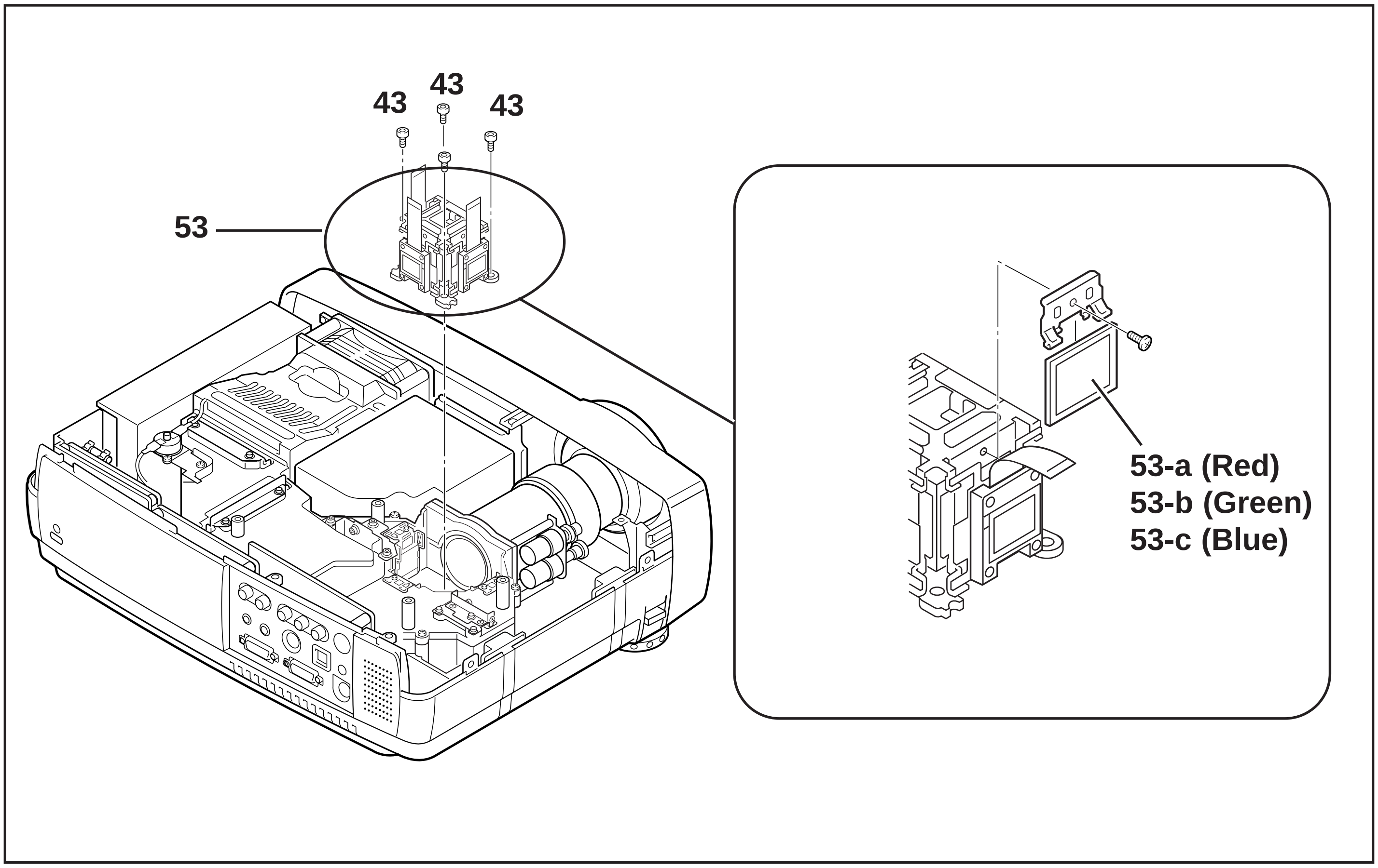


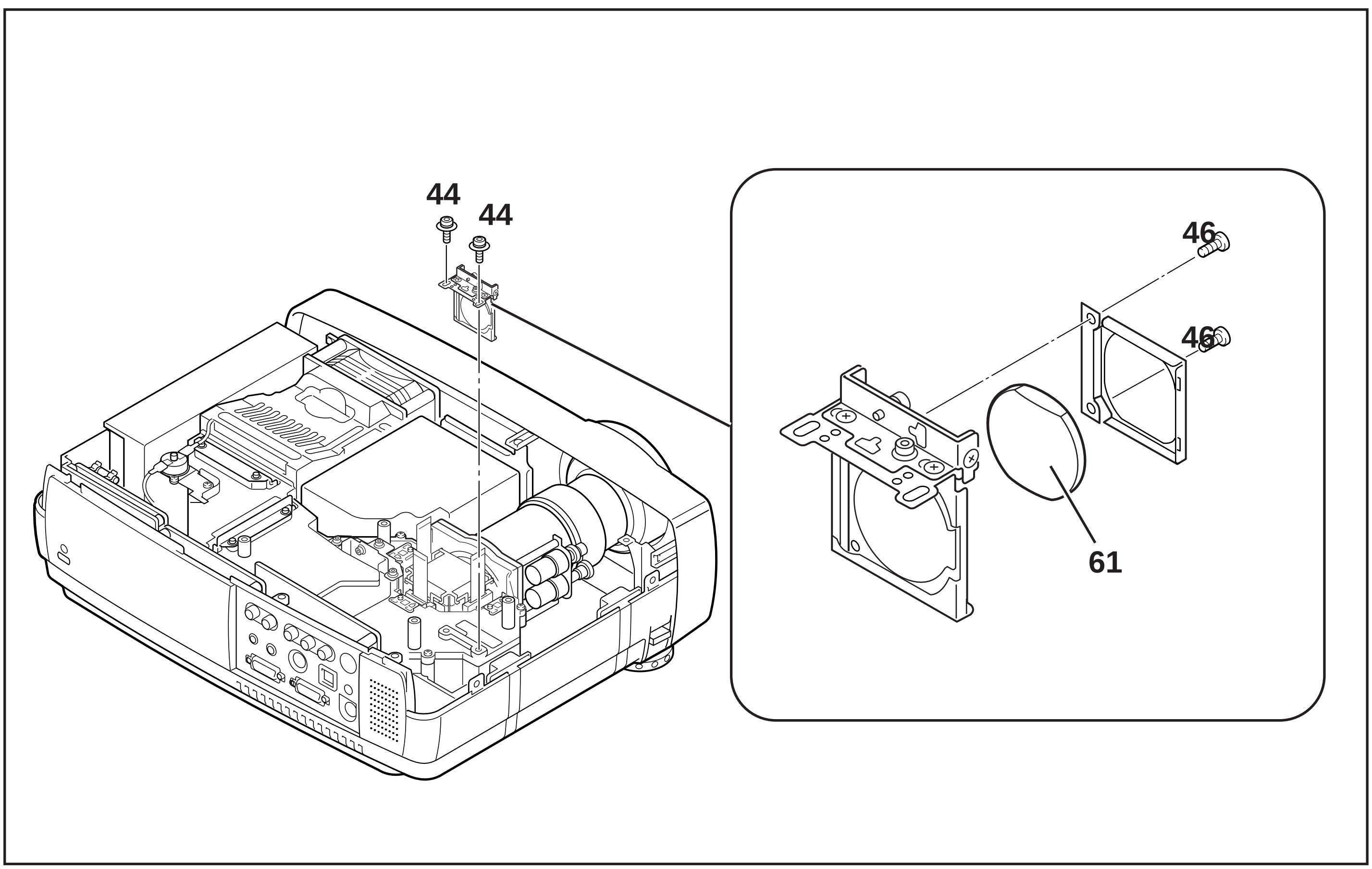
Optical Parts List



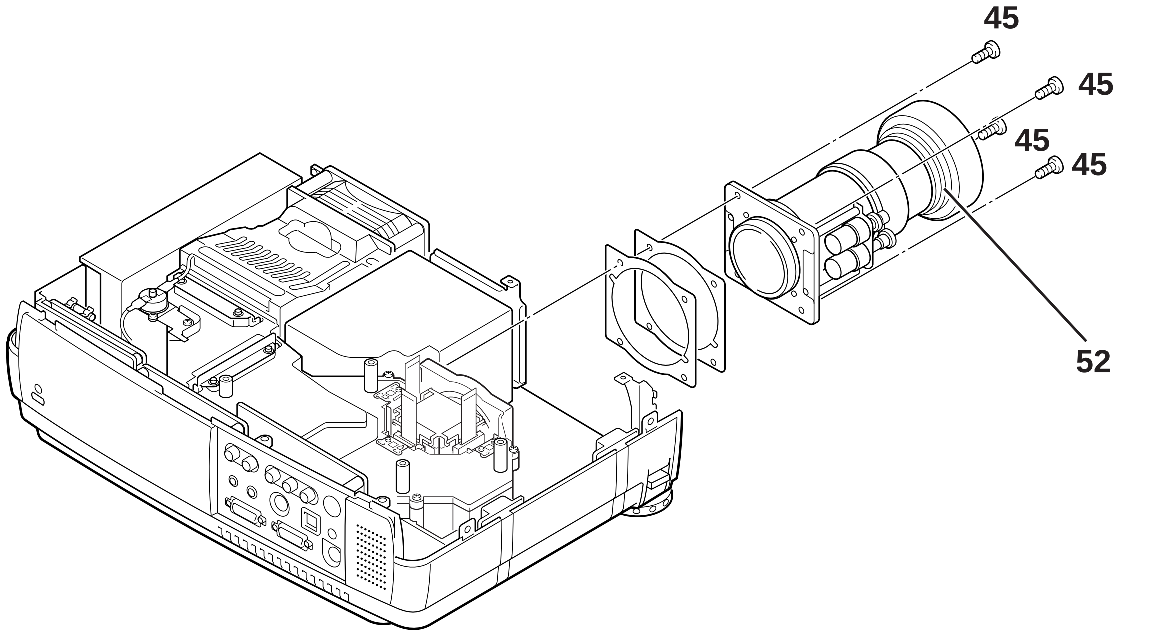


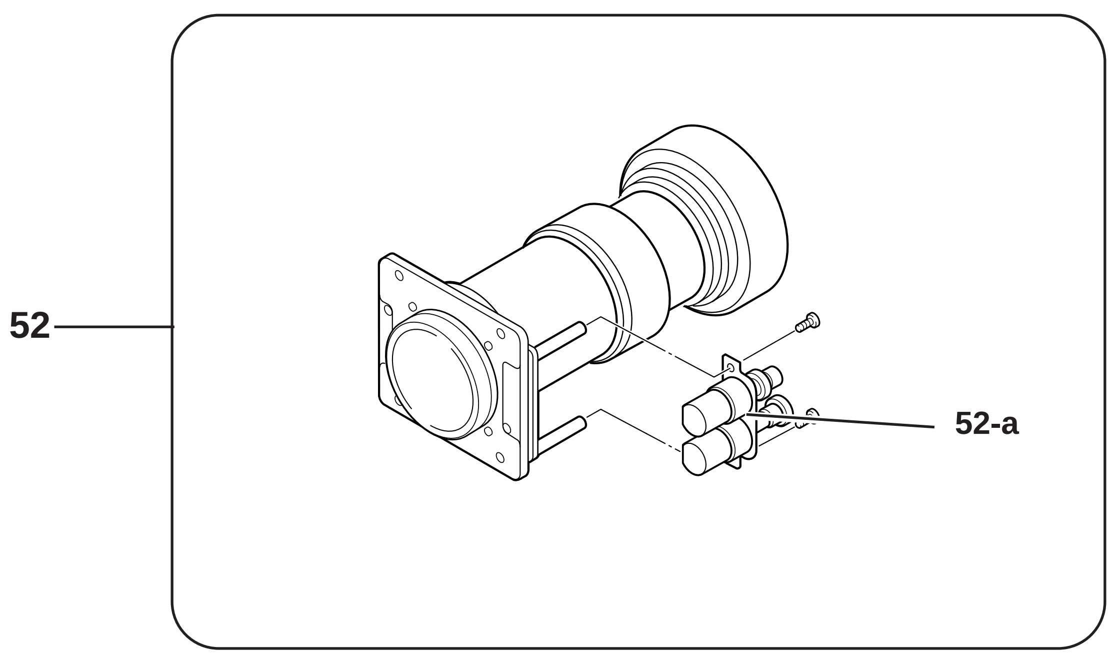
Optical Parts List



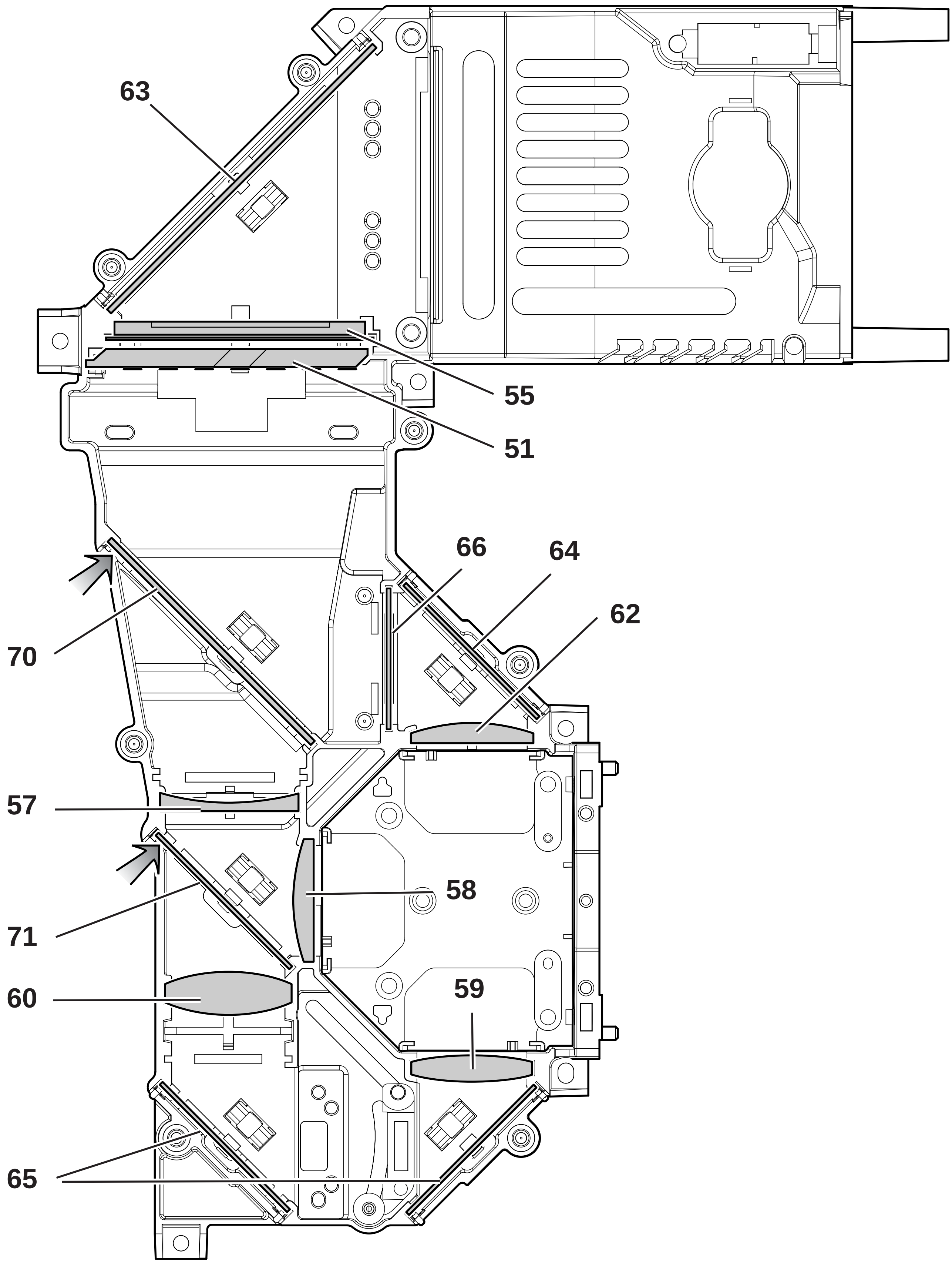


Optical Parts List





Optical Parts List



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(ME8E) Mar. 2002

■ Diagrams & Drawings

Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
CP-16t	ME8-CP-16t00

This model provides the following boards, and the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Board Name	Board Number
KEY SW BOARD	1AA0B10C34000
MAIN BOARD	1AA0B10C371BA
TEMP BOARD	1AA0B10C3710B
AV BOARD	1AA0B10C3700A
AV SUB BOARD	1AA0B10C3700B
POWER BOARD	1AA0B10C352BA
P.F. BOARD	1AA0B10C352BB
LINE FILTER BOARD	1AA0B10C3520C
R/C BOARD	1AA0B10C3520D

These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. ME8-CP-16t00. File with the service manual No. SM5110340.

Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal(1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading

Example 2000 K K 1000 BG

Example 160 E M 10

- BG → Characteristic
- 1000 / 10 → Capacitance value
  Excepting electric capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are in pF.
- K / M → Tolerance
- K / E → Type
- 2000 / 160 → Rated voltage

Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypromylar
B	Ceramic (semiconductor)
G	Metalized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

Mark	Tolerance	
A	not specified	
B	±0.1	
C	±0.25	
D	±0.5	
F	±1	
G	±2	
E	±2.5	
H	±3	
J	±5	
K	± 0	
M	±20	
N	±30	
P	+100	-0
Q	+30	-10
T	+50	-10
U	+75	-10
V	+20	-10
W	+100	-10
X	+40	-20
Y	+150	-10
Z	+80	-20

Coil Reading

Example L2 C1 4R7 K N

- K → Tolerance
- 4R7 → Inductance value
- C1 → Manufacture code
- L2 → Unique code

Mark	Tolerance (nH)	Mark	Tolerance (%)
C	±0.25	G	±2
D	±0.5	J	±5
S	±0.3	K	±10
A	±0.2	L	±15
		M	±20

Resistor Reading

Example 1/2 D J 10K B

Example 6 W K 8.2

Example 1/2 C K 1M

- B → Characteristic
  - Z (Carbon fuse)
  - B (Non-burnable)
- 10K / 8.2 / 1M → Resistance value
  - K indicates in K
  - M indicate in M
- J / K → Tolerance (see below table)
- D / W / C → Material (see below table)
- 1/2 / 6 → Rated wattage (W)

Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire wounding or cement
H	Ceramic
F	Fusible

Tolerance table

Mark	Tolerance
A	±0.05
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
J	±5
K	±10
M	±20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

Diode

Mark	Type number
R	1S2076A,1S2473,1N4148
AA	1S2076A,1S2473,1SS133,1N4148

Transistor

(1) NPN type

Mark	Type number				
--	2SC536	2SC945A	2SC1815	2SC1740S	
AD	NF, NG	PA, QA	Y, GR	Q, R, S	
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S	

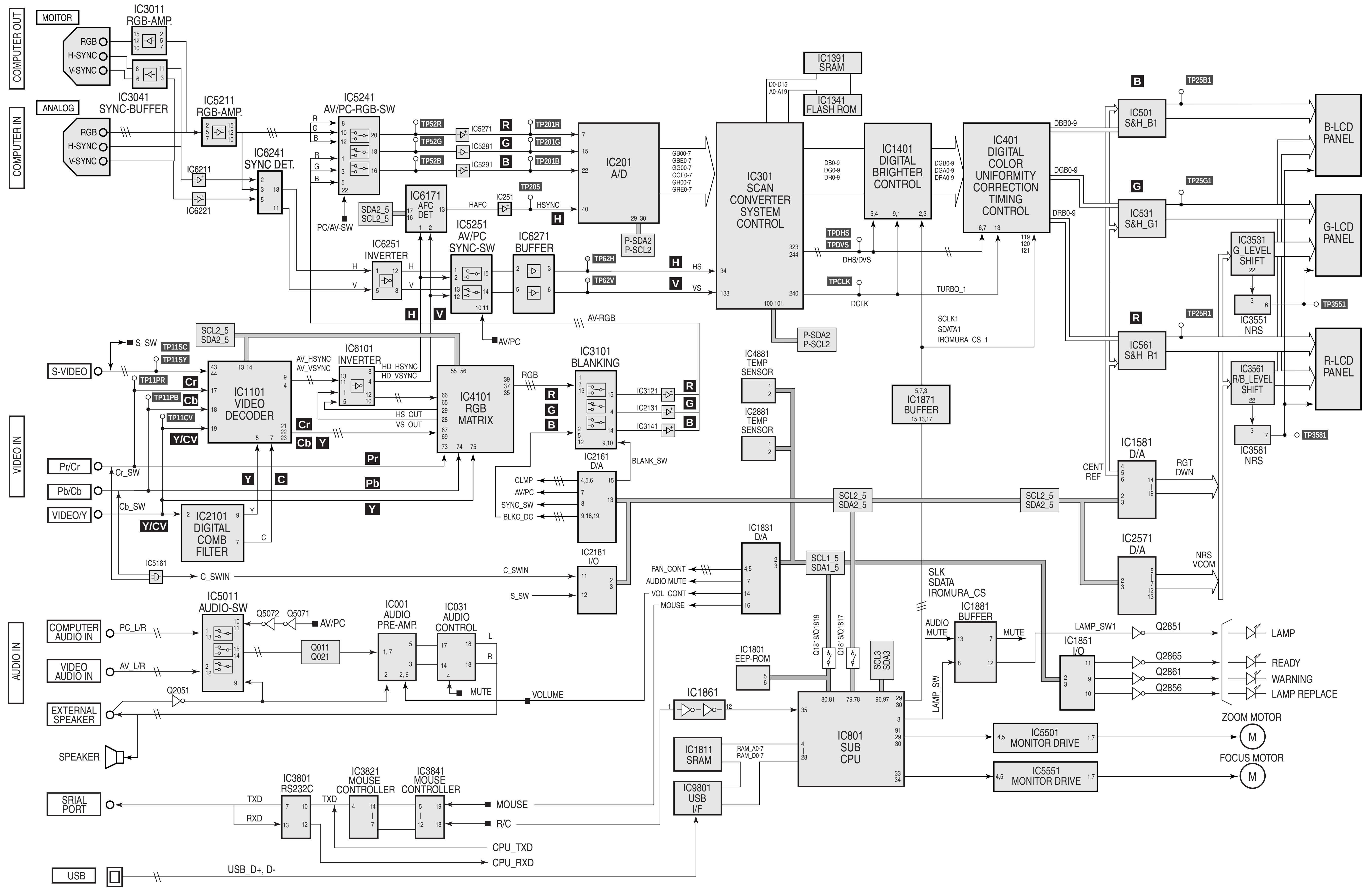
(2) PNP type

Mark	Type number				
--	2SA608	2SA564A	2SA1015	2SA933S	
AB	NF	R	Y, GR	R	
AC	NF	Q, R	O, Y, GR	Q, R	

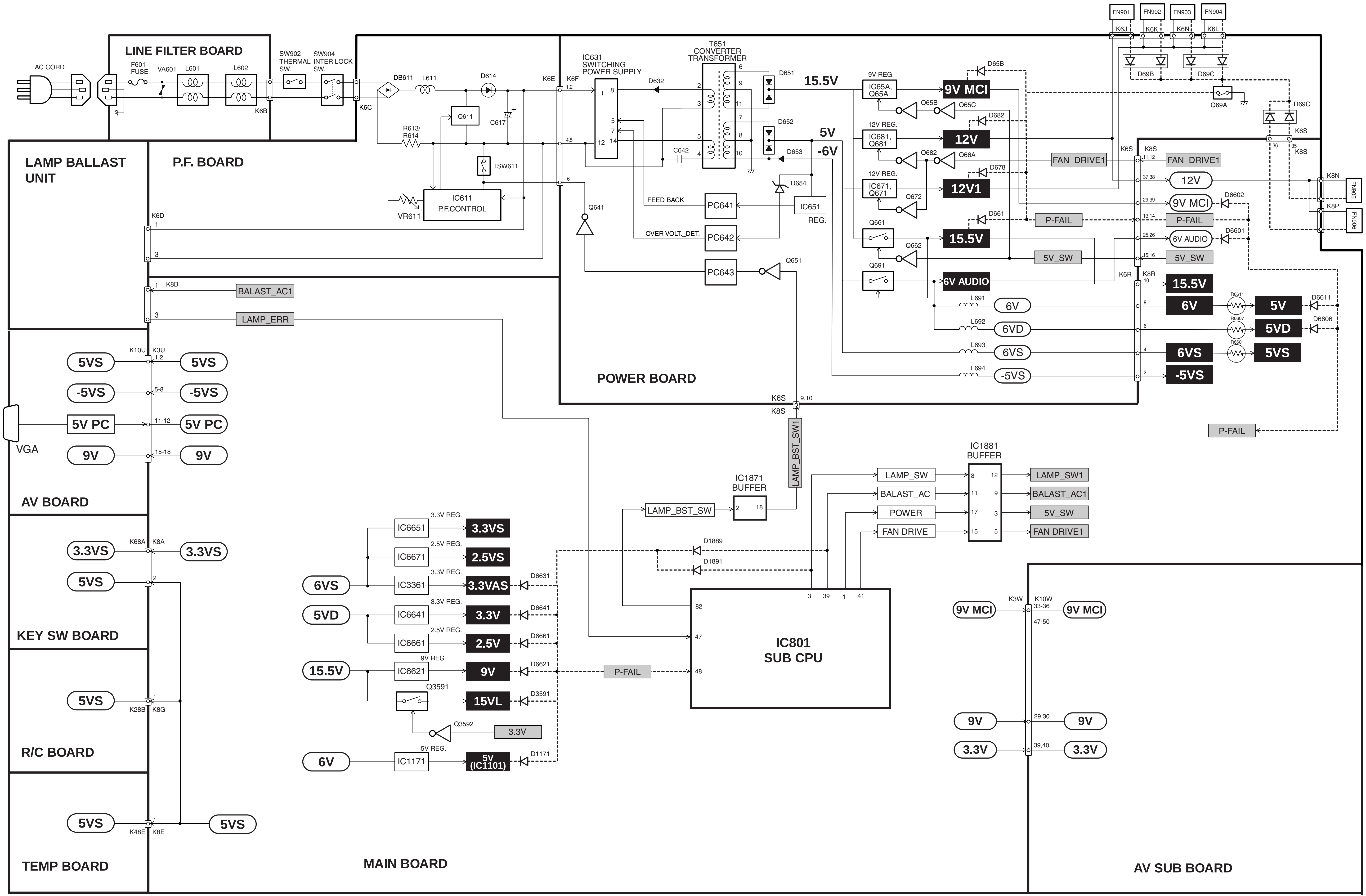
(3) Chip type

Mark	Type number				
--	2SA1179/N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

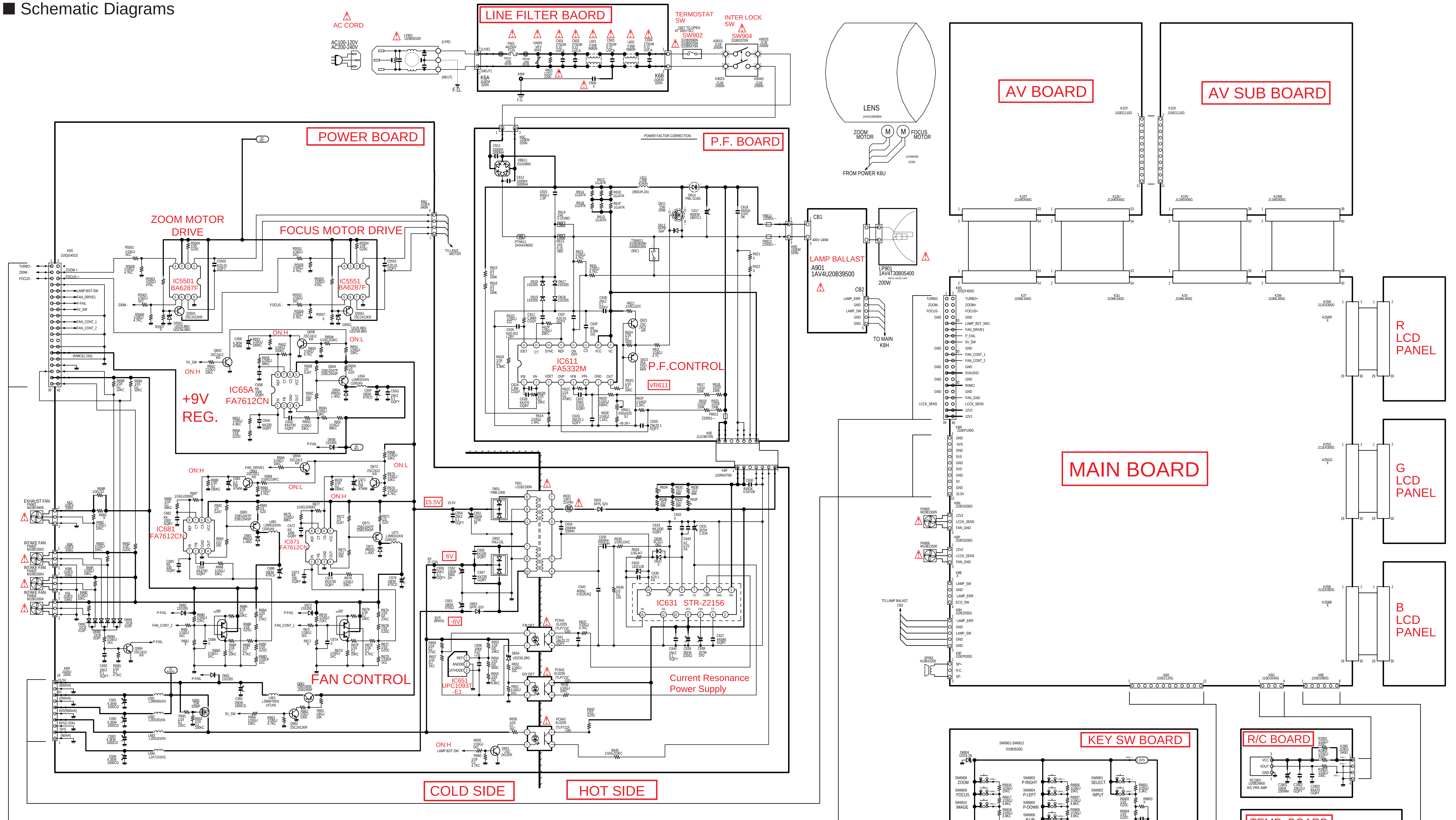
■ Circuit Block Diagram



■ Power Supply Lines



Schematic Diagrams



CAUTION

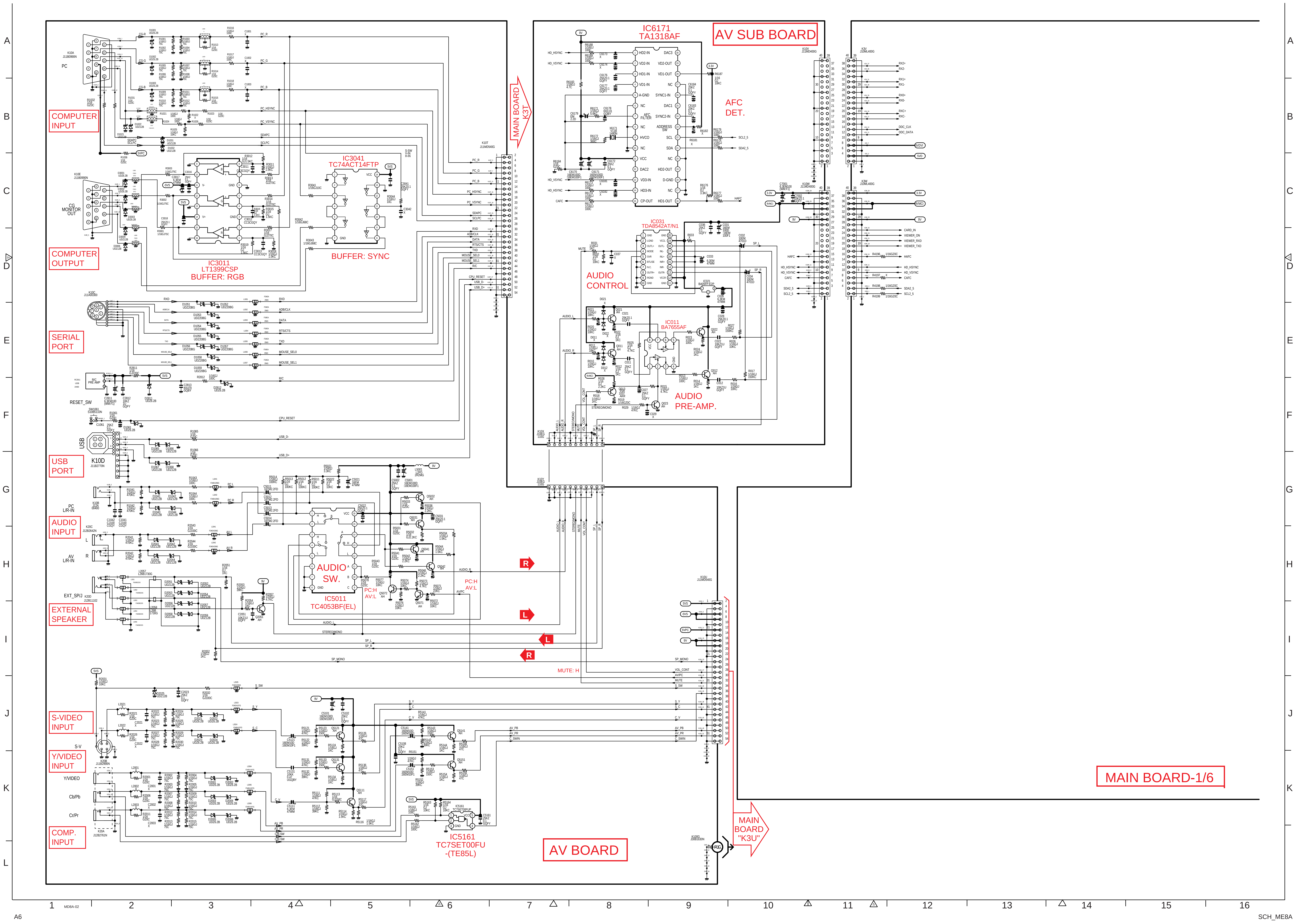
Fuse of the specified parts number must be used.
Unauthorized substitutions may result in fire or accident.

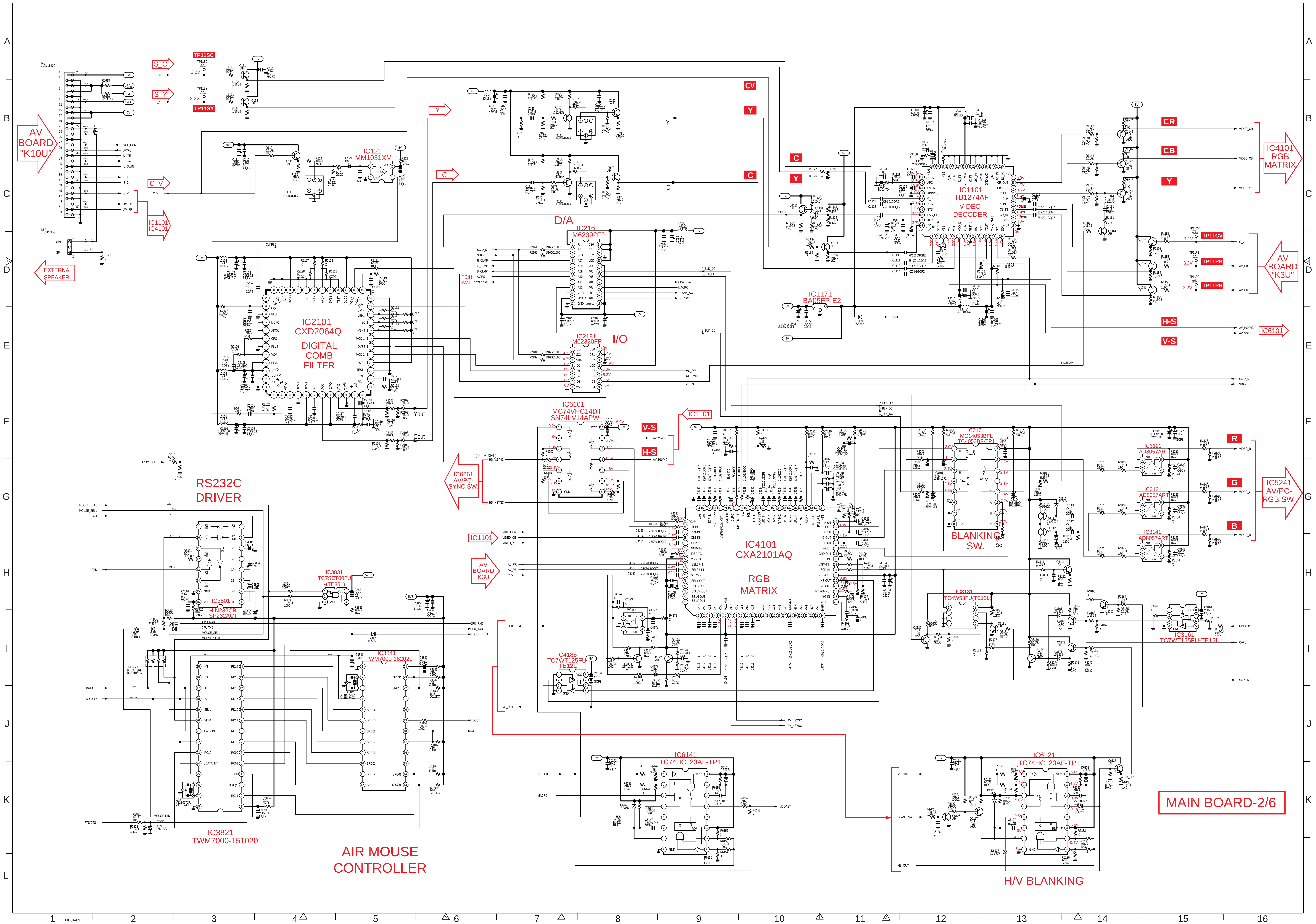
CAUTION

Components indicated by a mark ⚠ in this schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of these parts must be made by exactly the same parts.

This projector is isolated from AC line by using the internal converter transformer.
Please pay attention to the following notes in servicing.

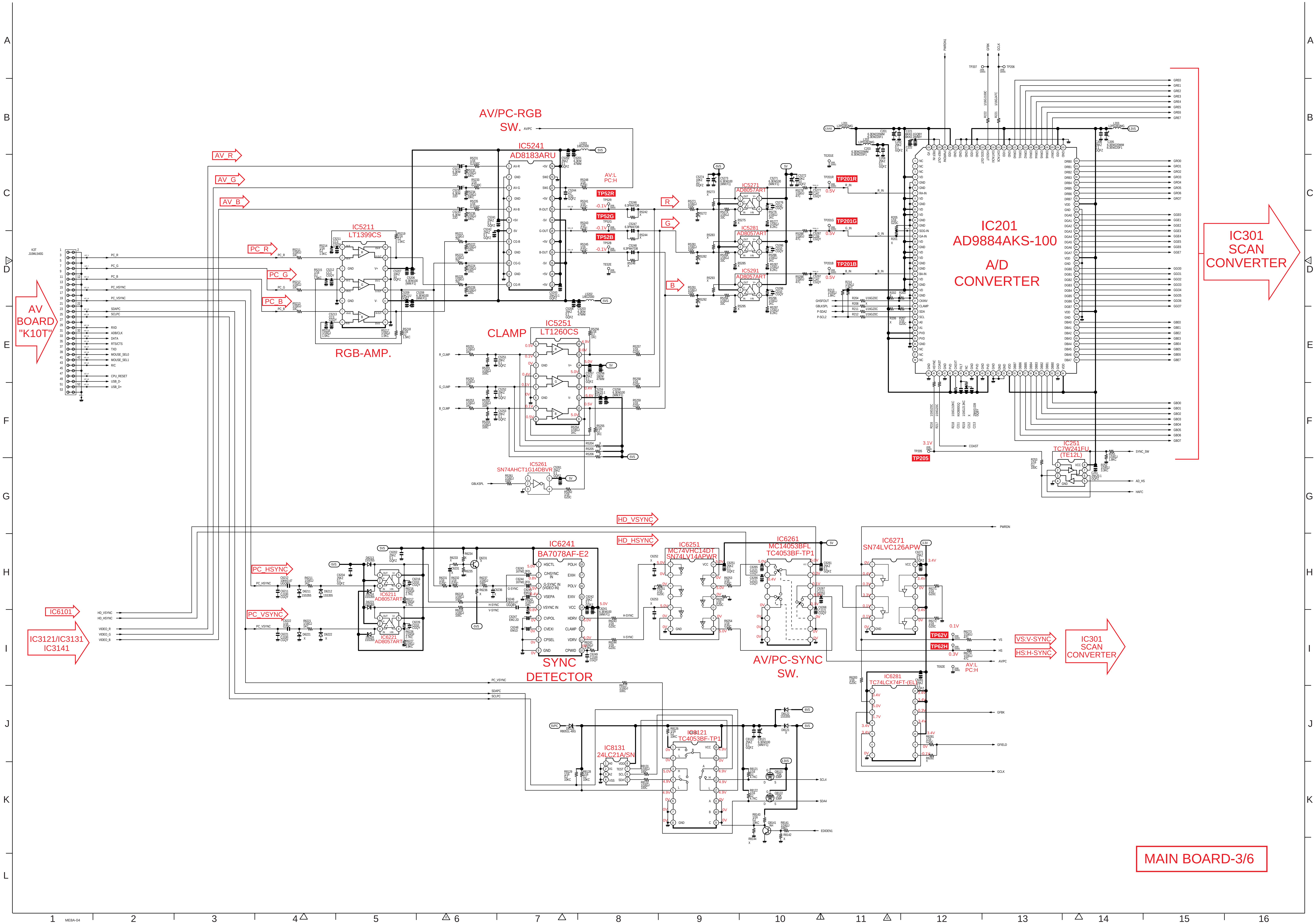
① Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
② Do not shorten the circuit between hot and cold sides.
③ The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

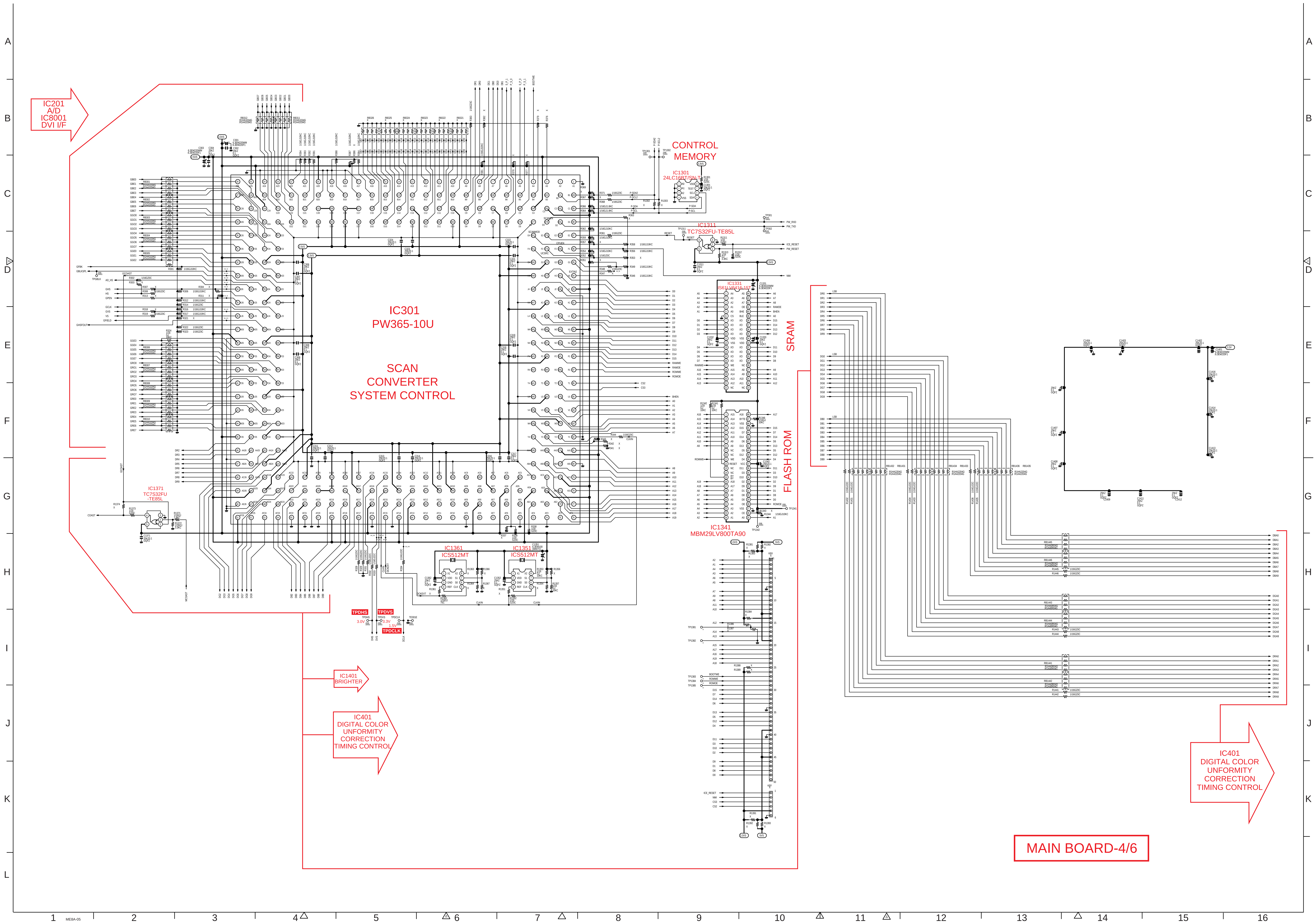

COMPUTER INPUT
COMPUTER OUTPUT
SERIAL PORT
USB PORT
AUDIO INPUT
EXTERNAL SPEAKER
S-VIDEO INPUT
Y/VIDEO INPUT
COMP. INPUT
IC3011
LT1399CSP
BUFFER: RGB
IC3041
TC74ACT14FTP
BUFFER: SYNC
MAIN BOARD
K3T
AUDIO SW.
IC5011
TC4053BF(EL)
PC:H
AV:L
IC5161
TC7SET00FU
-(TE85L)
AV BOARD
IC6171
TA1318AF
AV SUB BOARD
AFC DET.
IC031
TDA8542AT/N1
AUDIO CONTROL
IC011
BA7655AF
AUDIO PRE-AMP.
MUTE: H
MAIN BOARD "K3U"
MAIN BOARD-1/6


AV BOARD "K10U"
EXTERNAL SPEAKER
S_C
S_Y
C_V
TP11SC
TP11SY
IC1101 IC4101
IC121 MM1031XM
CV
Y
C
D/A
IC2161 M62392FP
IC2101 CXD2064Q
DIGITAL COMB FILTER
IC2181 M62320FP
I/O
PC:H AV:L
IC1101 TB1274AF
VIDEO DECODER
IC1171 BA05FP-E2
CR
CB
IC4101 RGB MATRIX
TP11CV
TP11PB
TP11PR
AV BOARD "K3U"
H-S
V-S
IC6101
IC6101 MC74VHC14DT SN74LV14APW
IC6261 AV/PC-SYNC SW
IC1101
Yout
Cout
RS232C DRIVER
IC3801 HIN232CB SP232ACT
IC3831 TC7SET08FU (TE85L)
IC3841 TWM7000-162020
IC3821 TWM7000-151020
AIR MOUSE CONTROLLER
IC4186 TC7WT125FU -TE12L
IC4101 CXA2101AQ
RGB MATRIX
IC3101 MC14053BFL TC4053BF-TP1
BLANKING SW.
IC3121 AD8057ART
IC3131 AD8057ART
IC3141 AD8057ART
IC5241 AV/PC-RGB SW.
R
G
B
IC3181 TC4W53FU(TE12L)
IC3161 TC7WT125FU-TE12L
IC6141 TC74HC123AF-TP1
IC6121 TC74HC123AF-TP1
H/V BLANKING
MAIN BOARD-2/6

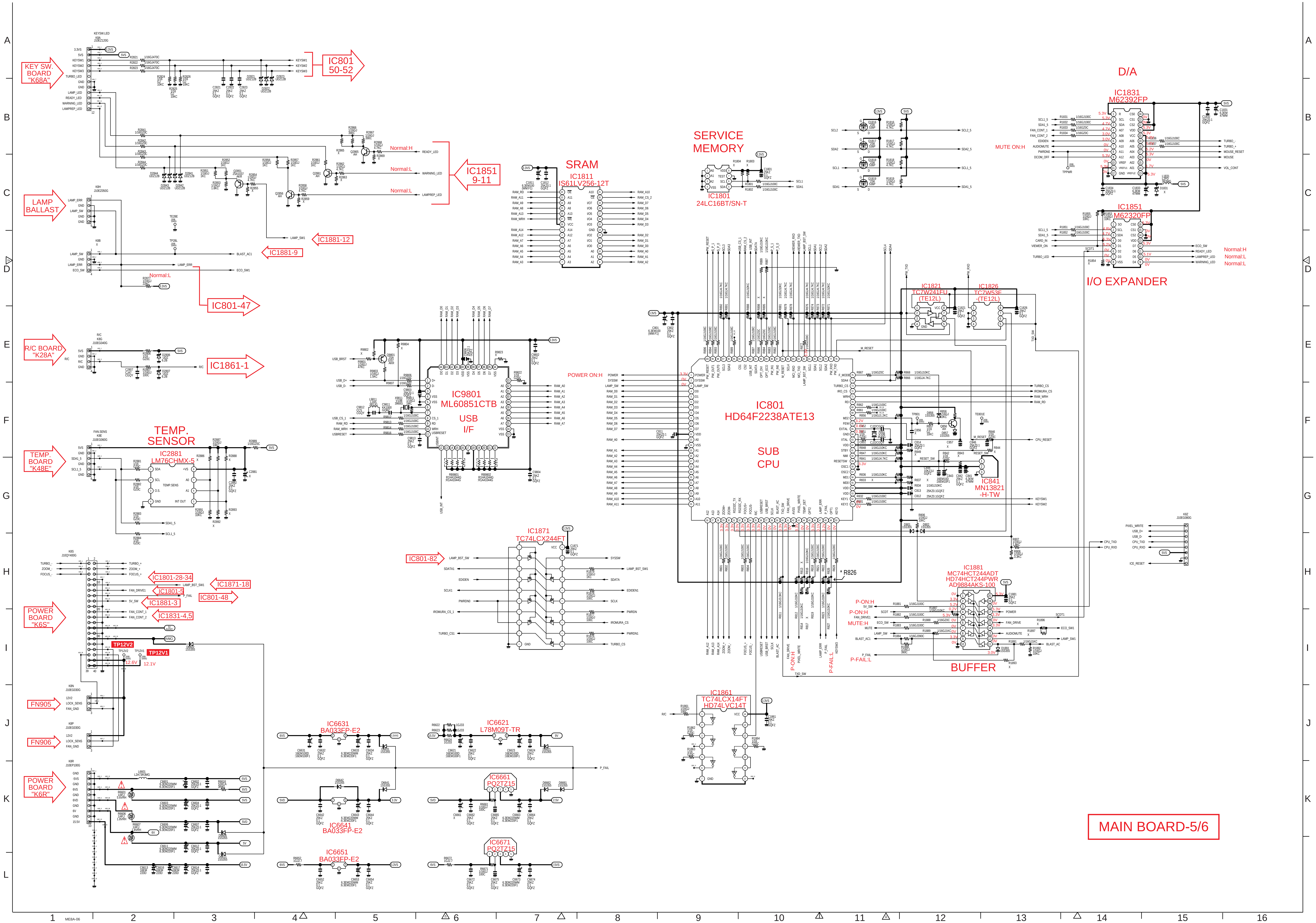
SCH_ME8A

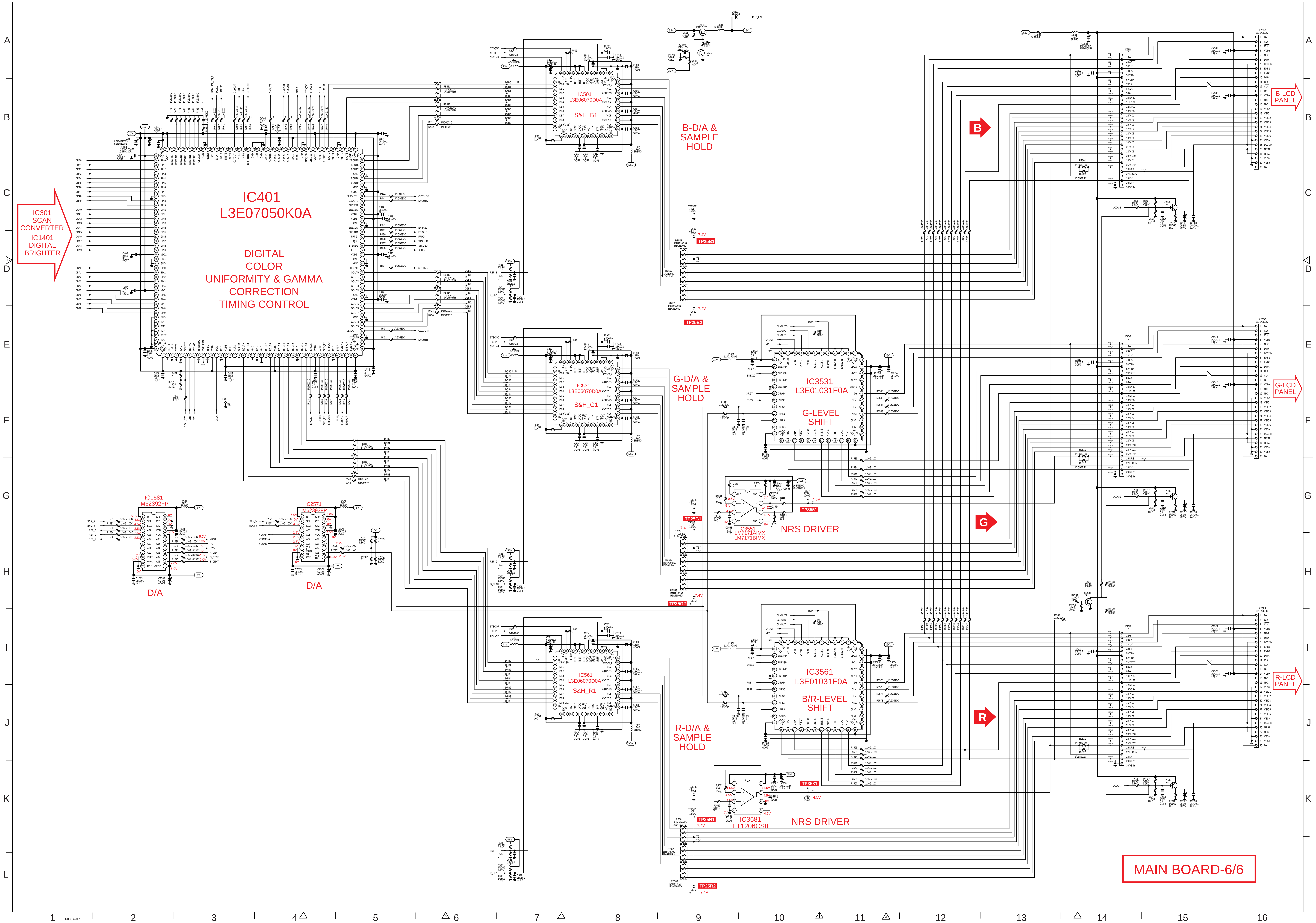
A7


AV/PC-RGB SW.
IC5241 AD8183ARU
AV_R
AV_G
AV_B
IC5211 LT1399CS
RGB-AMP.
PC_R
PC_G
PC_B
AV BOARD "K10T"
IC5251 LT1260CS
CLAMP
IC5271 AD8057ART
IC5281 AD8057ART
IC5291 AD8057ART
TP52R
TP52G
TP52B
TP201R
TP201G
TP201B
IC201 AD9884AKS-100
A/D CONVERTER
IC301 SCAN CONVERTER
IC251 TC7W241FU (TE12L)
TP205
IC5261 SN74AHCT1G14DBVR
HD_VSYNC
HD_HSYNC
PC_HSYNC
PC_VSYNC
IC6101
IC3121/IC3131 IC3141
IC6211 AD8057ART
IC6221 AD8057ART
IC6241 BA7078AF-E2
SYNC DETECTOR
IC6251 MC74VHC14DT SN74LV14APWR
IC6261 MC14053BFL TC4053BF-TP1
AV/PC-SYNC SW.
IC6271 SN74LVC126APW
IC6281 TC74LCX74FT-(EL)
TP62V
TP62H
VS:V-SYNC
HS:H-SYNC
IC301 SCAN CONVERTER
IC8121 TC4053BF-TP1
IC8131 24LC21A/SN
MAIN BOARD-3/6



IC201
A/D
IC8001
DVI I/F
CONTROL
MEMORY
IC1301
24LC16BT/SN-T
IC1311
TC7S32FU-TE85L
IC1331
SRAM
IC301
PW365-10U
SCAN
CONVERTER
SYSTEM CONTROL
FLASH ROM
IC1341
MBM29LV800TA90
IC1371
TC7S32FU
-TE85L
IC1361
ICS512MT
IC1351
ICS512MT
TPDHS
TPDVS
TPDCLK
IC1401
BRIGHTER
IC401
DIGITAL COLOR
UNFORMITY
CORRECTION
TIMING CONTROL
IC401
DIGITAL COLOR
UNFORMITY
CORRECTION
TIMING CONTROL
MAIN BOARD-4/6


MAIN BOARD-5/6
KEY SW. BOARD "K68A"
IC801 50-52
LAMP BALLAST
IC1851 9-11
IC1881-12
IC1881-9
IC801-47
R/C BOARD "K28A"
IC1861-1
TEMP. SENSOR
IC2881 LM76CHMX-5
TEMP. BOARD "K48E"
POWER BOARD "K6S"
POWER BOARD "K6R"
FN905
FN906
SRAM
IC1811 IS61LV256-12T
SERVICE MEMORY
IC1801 24LC16BT/SN-T
IC9801 ML60851CTB
USB I/F
IC801 HD64F2238ATE13
SUB CPU
D/A
IC1831 M62392FP
IC1851 M62320FP
I/O EXPANDER
IC1821 TC7W241FU (TE12L)
IC1826 TC7W53F -(TE12L)
IC841 MN13821 -H-TW
IC1871 TC74LCX244FT
IC1881 MC74HCT244ADT HD74HCT244PWR AD9884AKS-100
BUFFER
IC1861 TC74LCX14FT HD74LVC14T
IC6631 BA033FP-E2
IC6621 L78M09T-TR
IC6641 BA033FP-E2
IC6661 PQ2TZ15
IC6651 BA033FP-E2
IC6671 PQ2TZ15
IC801-82
IC1801-28-34
IC1871-18
IC1801-5
IC801-48
IC1881-3
IC1831-4,5
POWER ON:H
MUTE ON:H
P-ON:H
MUTE:H
P-FAIL:L



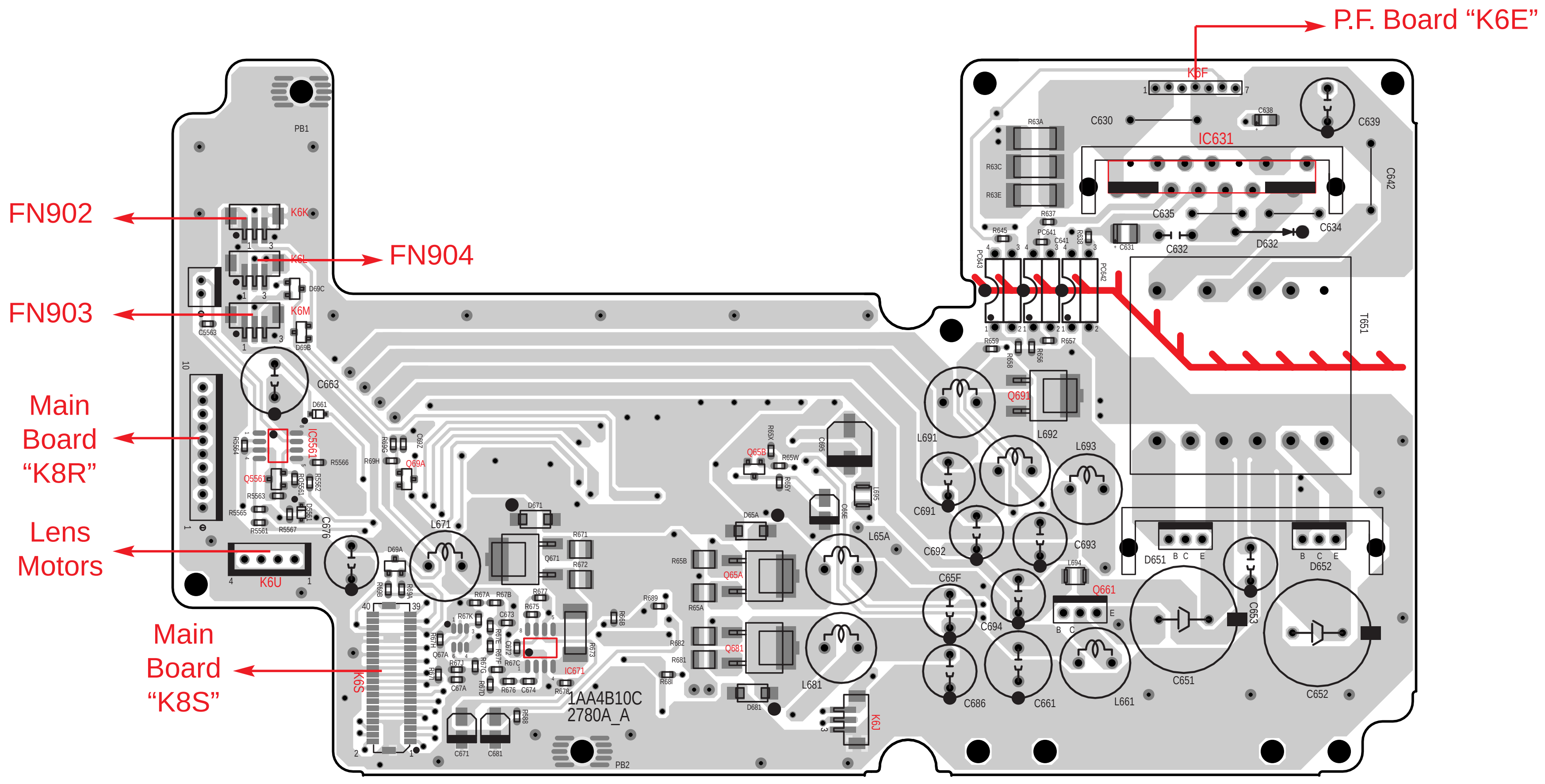
IC301
SCAN
CONVERTER
IC1401
DIGITAL
BRIGHTER
IC401
L3E07050K0A
DIGITAL
COLOR
UNIFORMITY & GAMMA
CORRECTION
TIMING CONTROL
IC501
L3E06070D0A
S&H_B1
B-D/A &
SAMPLE
HOLD
IC531
L3E06070D0A
S&H_G1
G-D/A &
SAMPLE
HOLD
IC561
L3E06070D0A
S&H_R1
R-D/A &
SAMPLE
HOLD
IC3531
L3E01031F0A
G-LEVEL
SHIFT
IC3561
L3E01031F0A
B/R-LEVEL
SHIFT
IC3551
LM7171AIMX
NRS DRIVER
IC3581
LT1206CS8
NRS DRIVER
IC1581
M62392FP
D/A
IC2571
M62393FP
D/A
B-LCD
PANEL
G-LCD
PANEL
R-LCD
PANEL
MAIN BOARD-6/6

■ Printed Wiring Board Diagrams

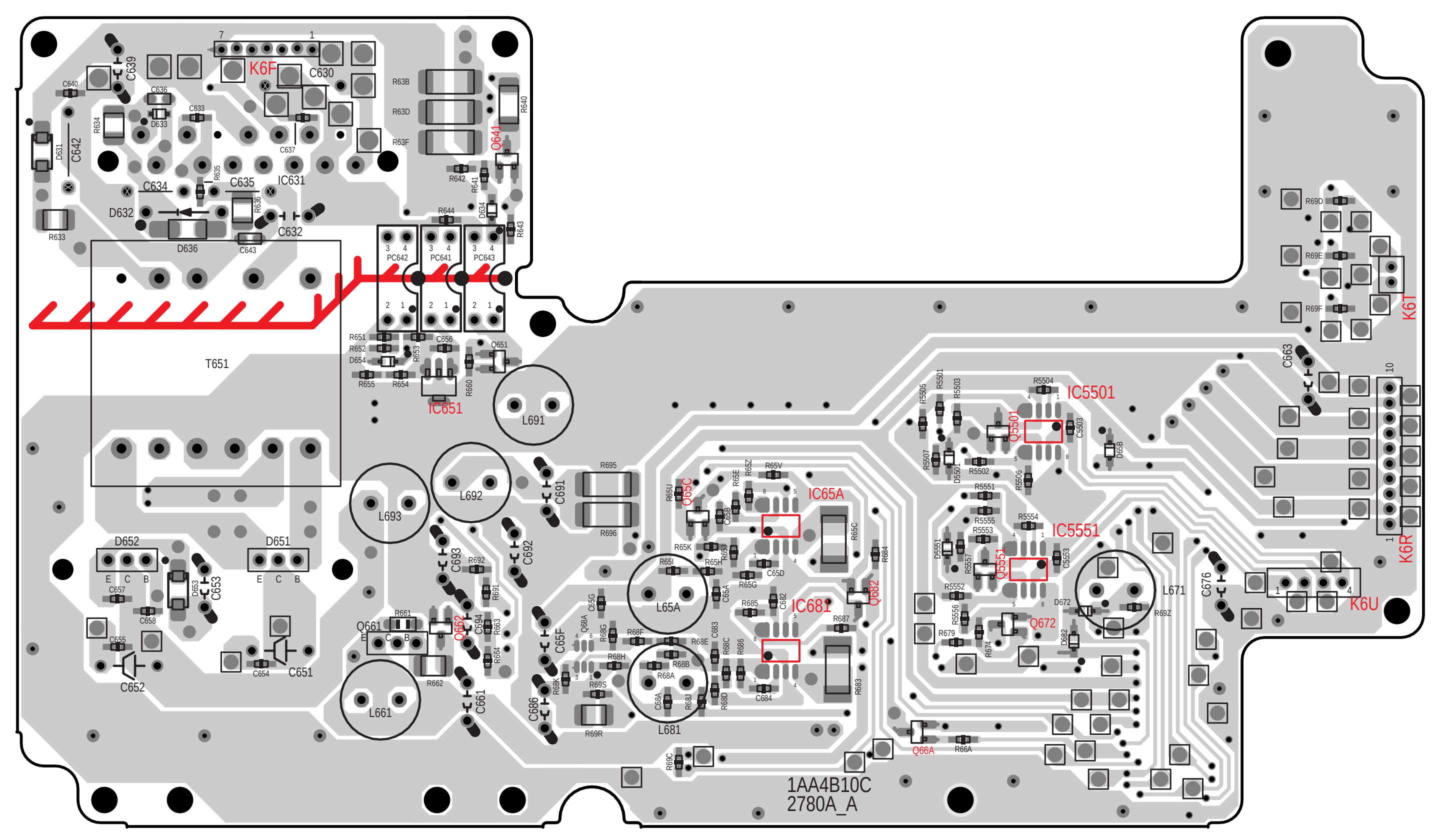
⚠ CAUTION

This projector is isolated from AC line by using the internal converter transformer.
Please pay attention to the following notes in servicing
1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

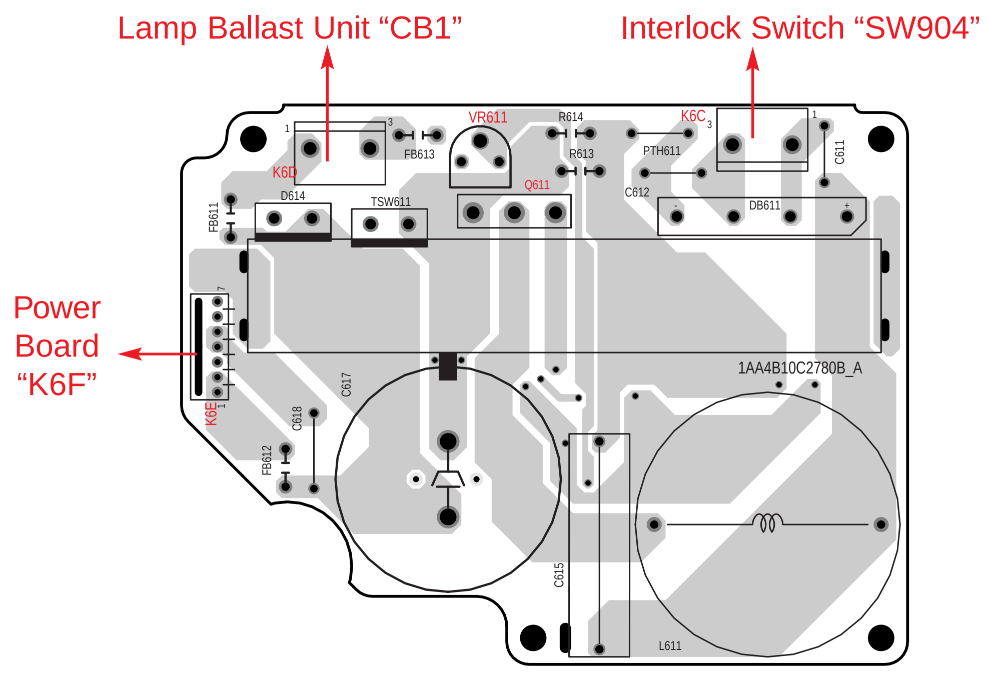
Power Board (SIDE:A)



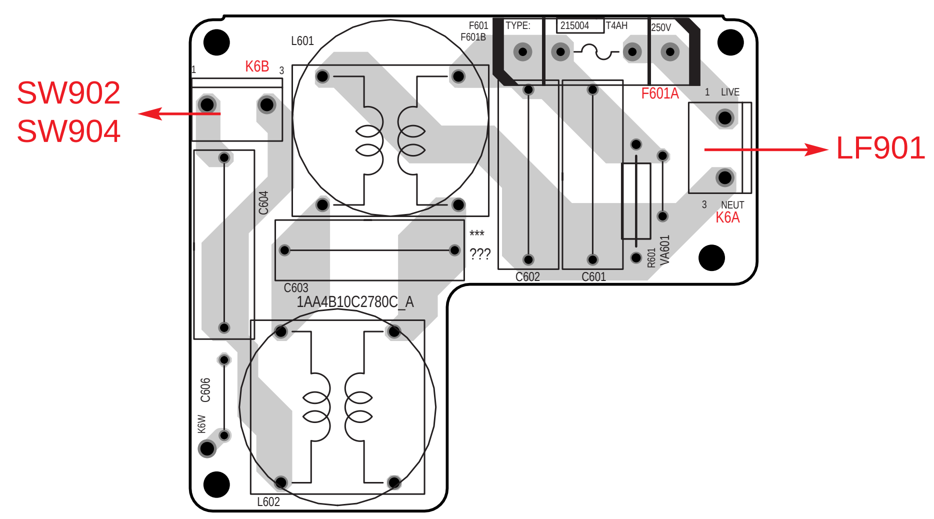
Power Board (SIDE:B)



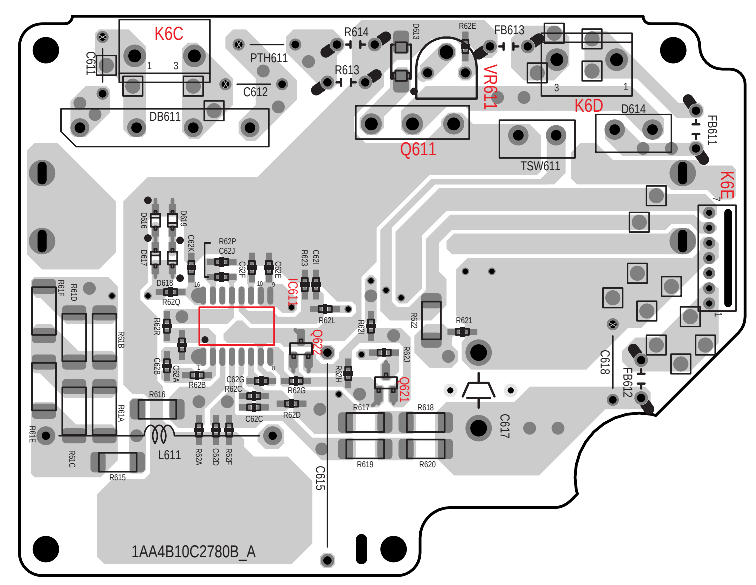
P.F. Board (SIDE:A)



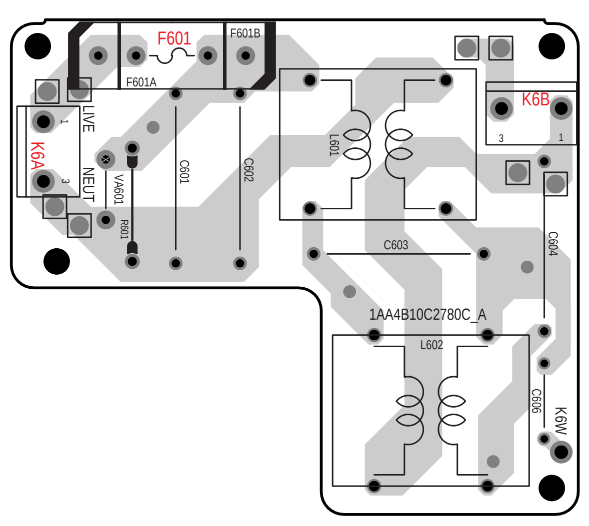
Line Filter Board (SIDE:A)



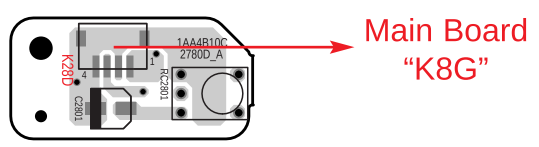
P.F. Board (SIDE:B)



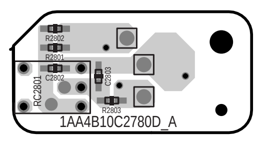
Line Filter Board (SIDE:B)



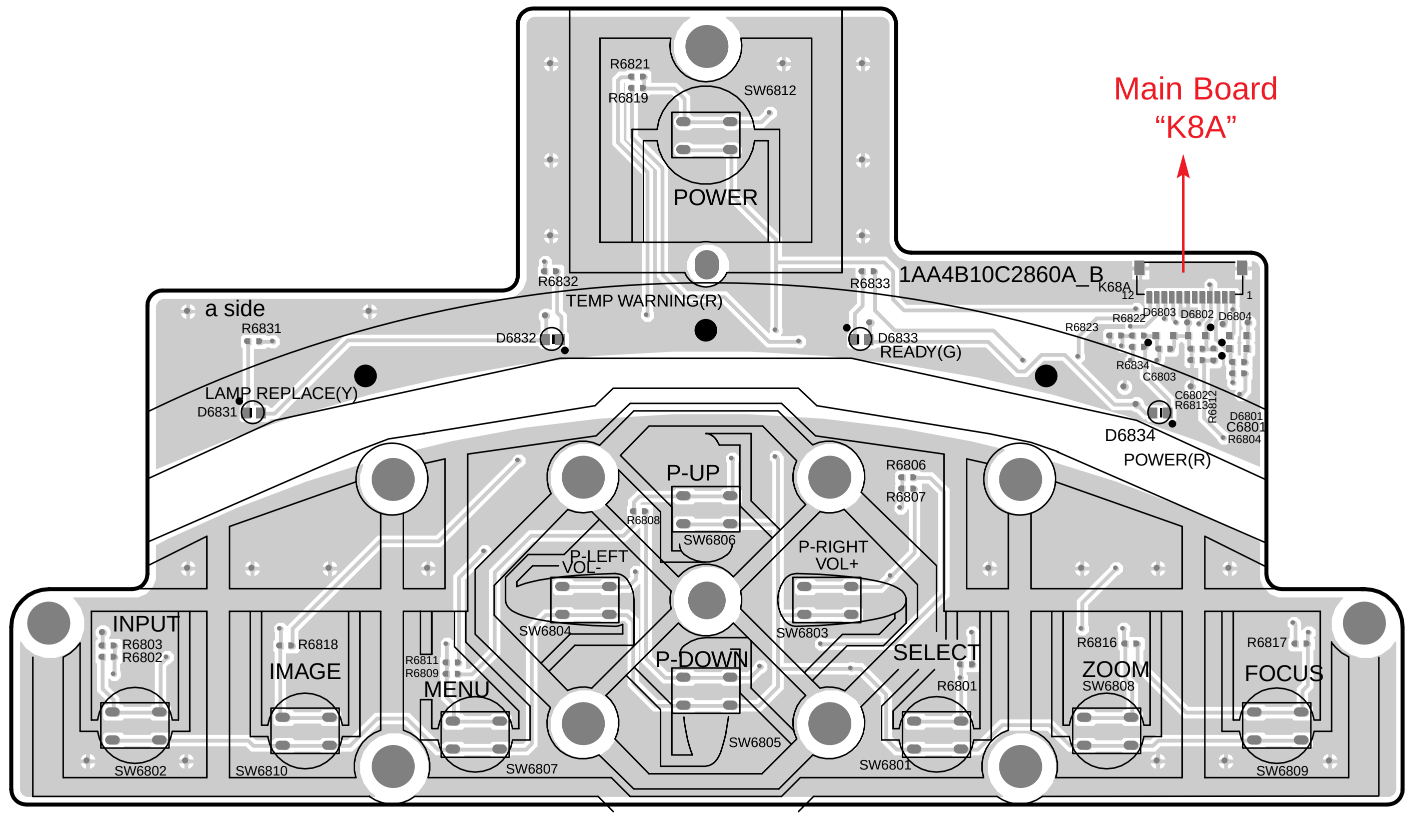
R/C Board (SIDE:A)



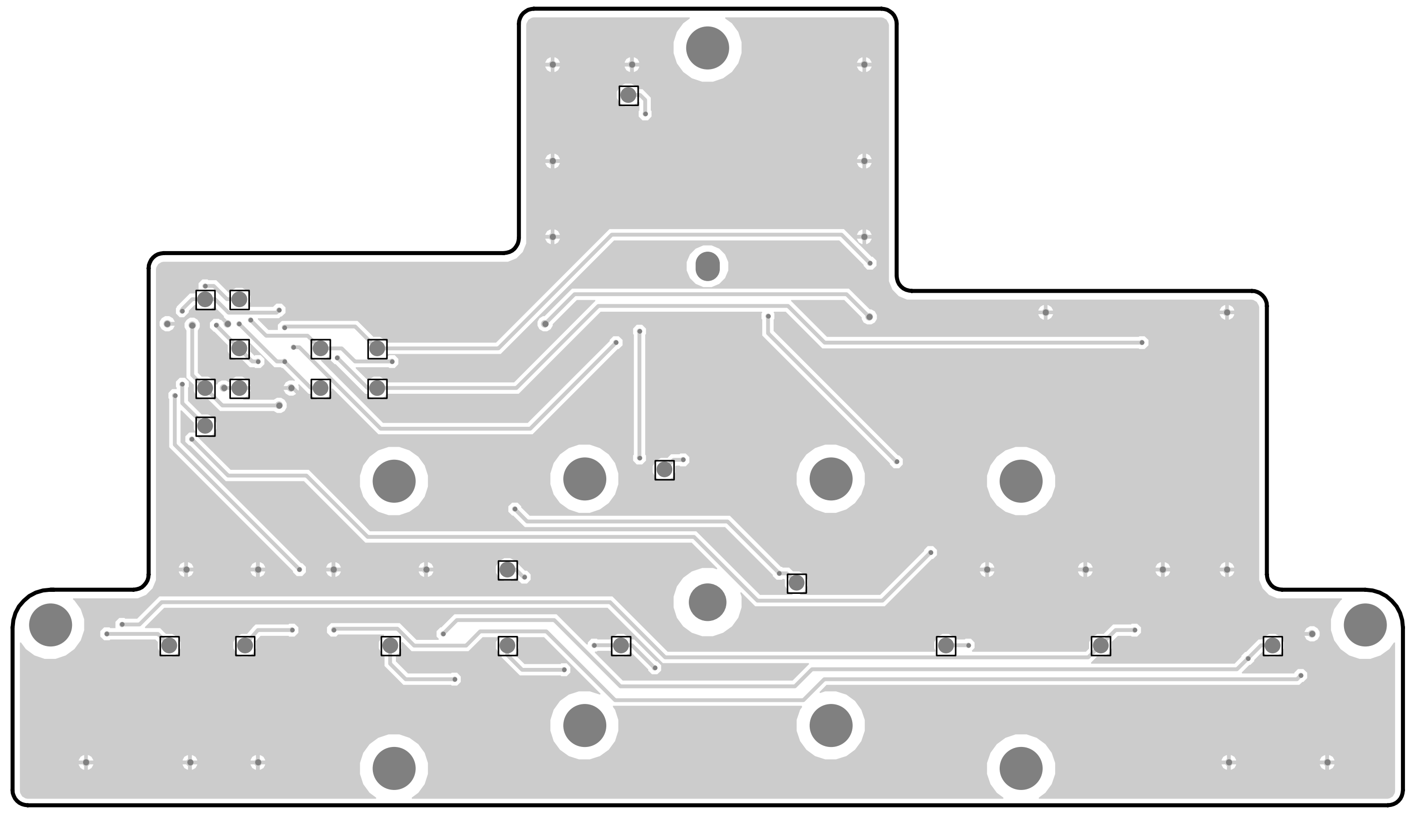
R/C Board (SIDE:B)



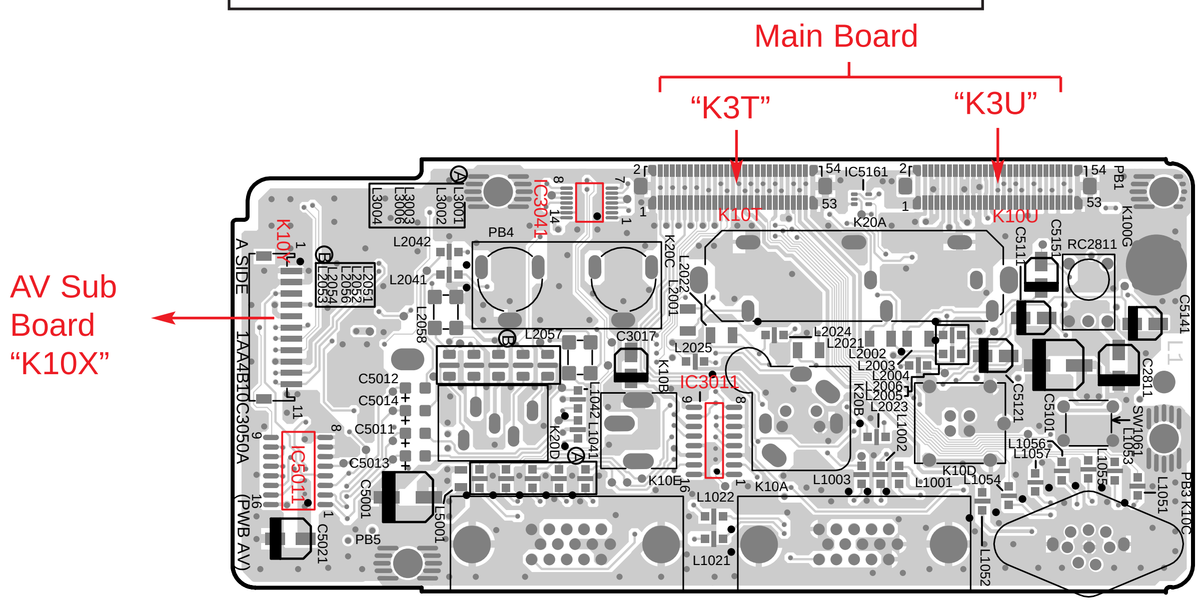
SW Board (SIDE:A)



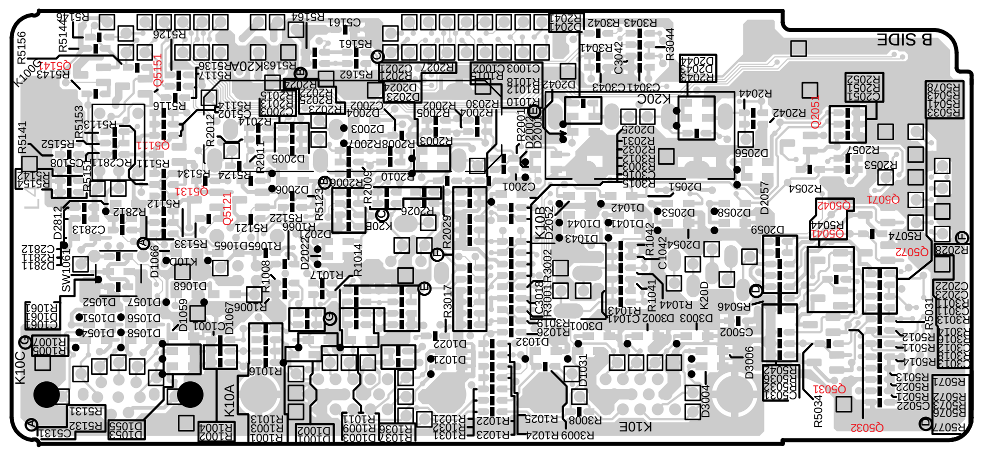
SW Board (SIDE:B)



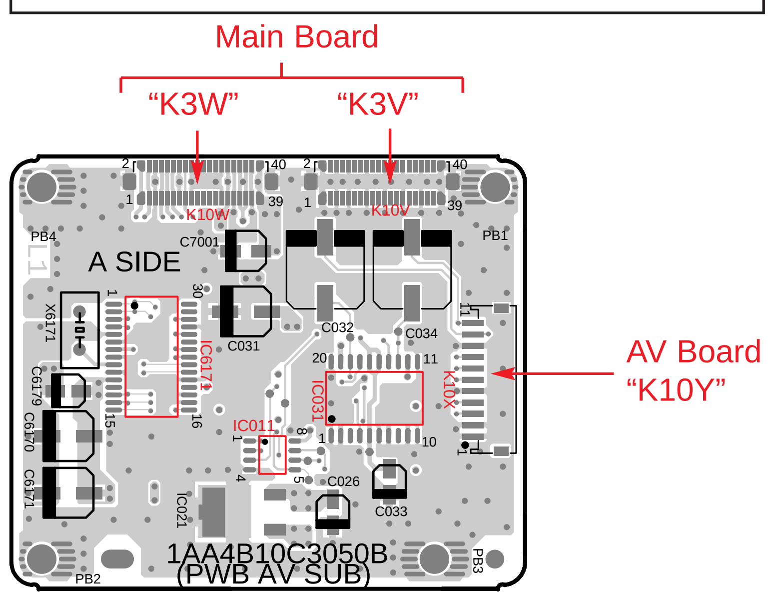
AV Board (SIDE:A)



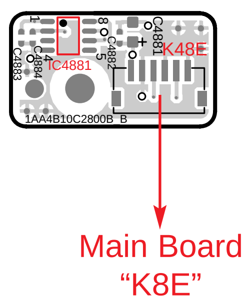
AV Board (SIDE:B)



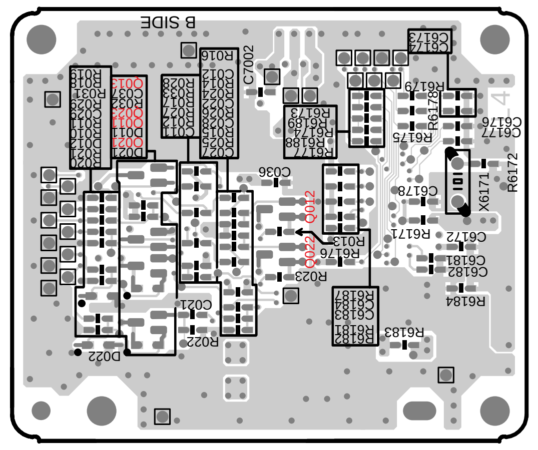
AV Sub Board (SIDE:A)



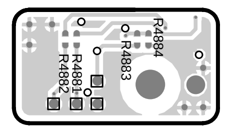
Temp Board (SIDE:A)



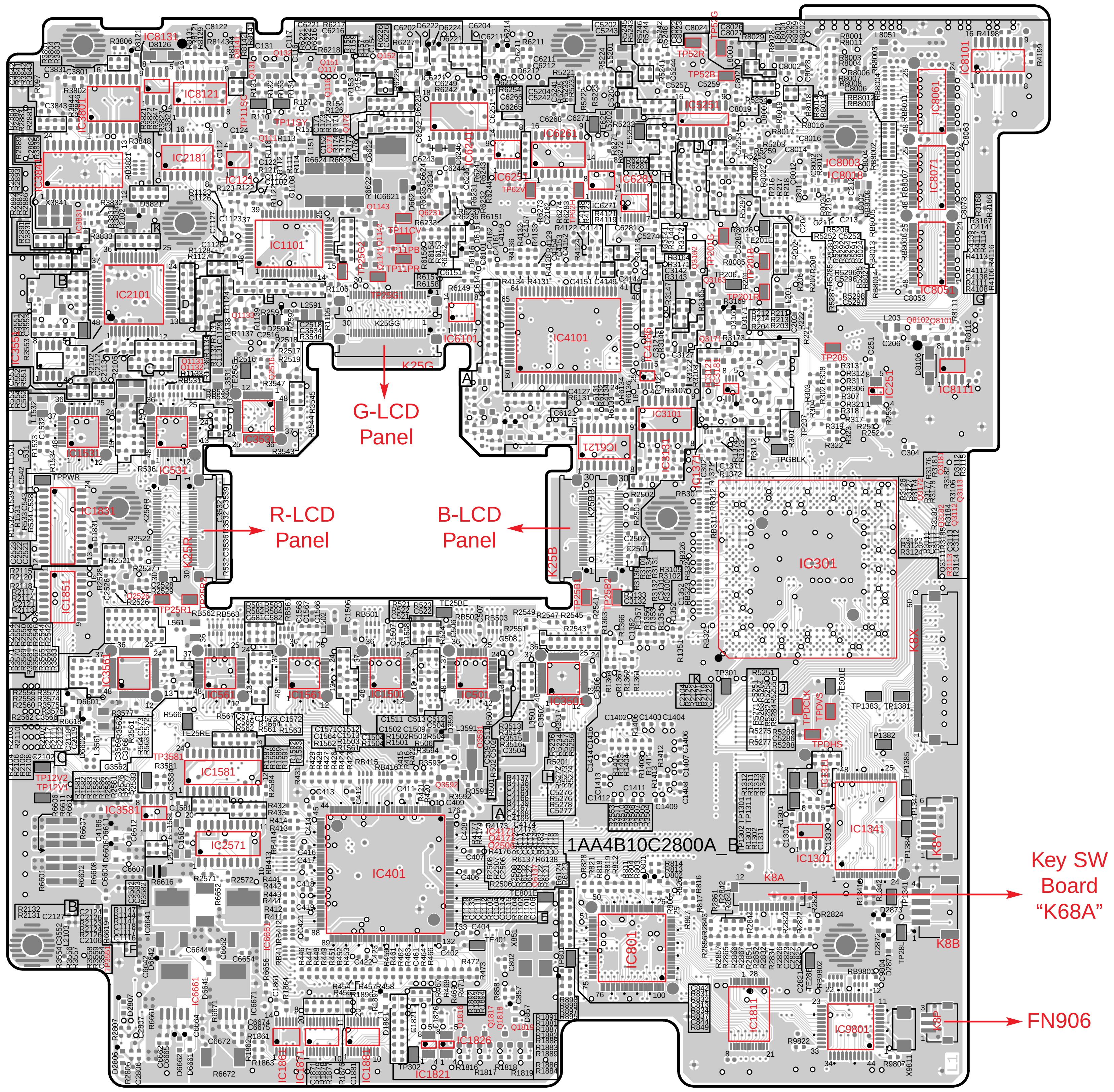
AV Sub Board (SIDE:B)



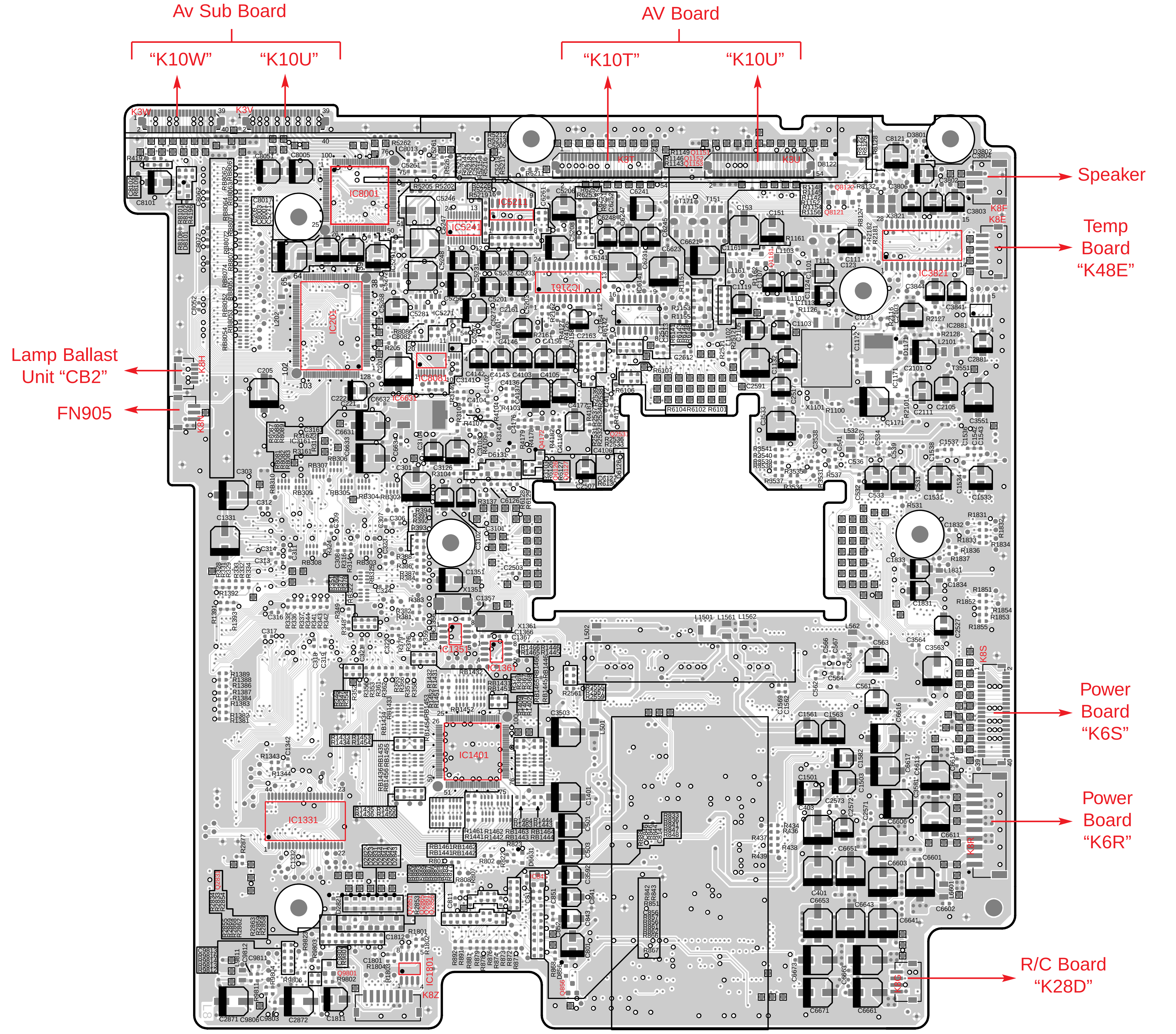
Temp Board (SIDE:B)



Main Board (SIDE:A)

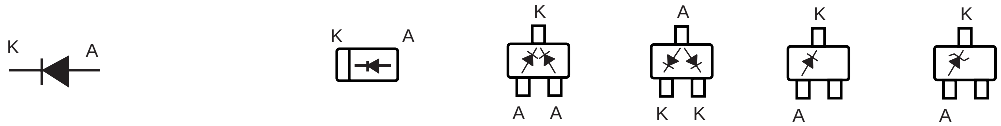


Main Board (SIDE:B)



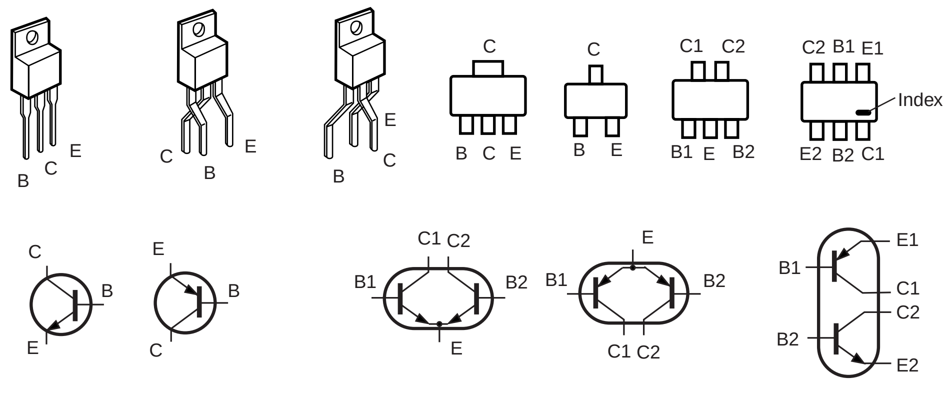
■ Pin description of diode, transistor and IC

● Diode



K: Cathode
A: Anode

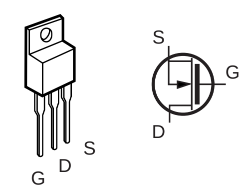
● Transistor/FET



C: Collector
B: Base
E: Emitter

D: Drain
G: Gate
S: Source

FET



● IC

